DOCUMENT RESUME

ED 434 429 EC 307 427

TITLE	Guidelines for the Roles and Responsibilities of the School-Based Speech-Language Pathologist.
INSTITUTION	American Speech-Language-Hearing Association, Rockville, MD.
PUB DATE	1999-03-00
NOTE	109p.
PUB TYPE	Guides - Non-Classroom (055)
EDRS PRICE	MF01/PC05 Plus Postage.
DESCRIPTORS	Delivery Systems; Elementary Secondary Education; Eligibility; Federal Legislation; Individualized Education Programs; *Integrated Services; Intervention; Job Analysis; *Language Impairments; Models; *Occupational Information; *Speech Impairments; *Speech Language Pathology; *Staff Role; Student Evaluation; Supervision; Teamwork

ABSTRACT

These guidelines are an official statement of the American Speech-Language-Hearing Association (ASHA) that address the official roles and responsibilities of school-based speech-language pathologists. Chapter 1 outlines the guiding principles that underlie the development of the document, provides federal and global definitions of speech-language pathology, and discusses federal statutes relating to the education of students with disabilities. A current model for providing speech and language services is presented. Chapter 2 describes specific roles and responsibilities of school-based speech-language pathologists. Core roles are listed and include: prevention, identification, assessment, evaluation, eligibility determination, Individualized Education Program (IEP) development, caseload management, intervention, counseling, re-evaluation, transition, dismissal (for students with language, articulation, phonology, fluency, voice/resonance, or swallowing disorders), supervision, and documentation and accountability. The responsibilities of the speech-language pathologist in each of these roles are described. The components of the IEP, service delivery options, and methods for effective intervention are also explained. Chapter 3 describes additional roles and opportunities for school-based speech-language pathologists, including community and professional partnerships, professional leadership opportunities, and advocacy. The final chapter summarizes the current and evolving roles of the speech-language pathologist. (Contains 165 references, an 82-item bibliography, and 13 tables.) (CR)

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Guidelines for the Roles and Responsibilities of the School-Based Speech-Language Pathologist

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Guidelines for the Roles and Responsibilities of the School-Based Speech-Language Pathologist

Ad Hoc Committee on the Roles and Responsibilities of the School-Based
Speech-Language Pathologist

American Speech-Language-Hearing Association

These guidelines are an official statement of the American Speech-Language-Hearing Association (ASHA). They were approved by ASHA's Legislative Council in March 1999. They provide guidance for school-based speech-language pathologists but are not official standards of the Association. The guidelines were prepared by the ASHA Ad Hoc Committee on the Roles and Responsibilities of the School-Based Speech-Language Pathologist: JoAn Cline, chair; Susan Karr, ex officio; Jacqueline Green; Ronald Laeder; Gina Nimmo; and Ronnie Watkins. Nancy Creaghead, 1997 vice president for professional practices in speech-language pathology, served as monitoring vice president in 1997–1998, and Crystal Cooper, 1994–1996 vice president for professional practices in speech-language pathology, served as monitoring vice president in 1996 and consultant in 1997–1998. The Committee members have extensive experience providing direct speech-language pathology services in school settings. The contributions of ASHA members, committee members, and staff peer reviewers are gratefully acknowledged and have been carefully considered. Additionally, the Committee wishes to thank those who shared state handbooks and district procedure manuals from the following states: California, Connecticut, Florida, Georgia, Illinois, Iowa, Kentucky, Maryland, Michigan, Nevada, New York, North Carolina, Ohio.

Table of Contents

Page

I. Introduction 1
  Purpose 1
  Guiding Principles 2
  Definitions 4
  History 6
  Current Model 10

II. Roles and Responsibilities 13
  Prevention 16
  Identification 17
  Assessment 19
  Evaluation 22
  Specific Evaluation Considerations 25
  Eligibility Determination 32
  IEP/IFSP Development 33
  Caseload Management 36
  Intervention for Students with Communication Disorders 39
  Intervention for Students with Communication Variations 51
  Counseling 52
  Re-evaluation 53
  Transition 54
  Dismissal 55
  Supervision 56
  Documentation and Accountability 57

III. Additional Roles and Opportunities 60
  Community and Professional Partnerships 60
  Professional Leadership Opportunities 63
  Advocacy 66

IV. Summary 67

References 68
Bibliography 81
Appendices 87
  A. ASHA Code of Ethics
  B. ASHA School Related Resources
  C. Goals 2000 Educate America Act: National Education Goals
  D. School Reform Issues Related to Speech-Language Pathology
  E. Advantages and Disadvantages of Types of Assessments
  F. Developmental Milestones for Speech and Language
  G. Examples of a Severity/Intervention Matrix
  H. Signs and Effects of Communication Disorders
  I. Example of an Educational Relevance Chart
  J. Example of Entry/Exit Criteria for Caseload Selections
  K. Example of Dismissal Criteria Chart

GUIDELINES QUICK REFERENCE

WHO	Definition of speech-language pathologist	Page 4
WHAT	Core roles	Page 14
WHEN	Eligibility determination	Page 33
WHERE	Caseload management/Service delivery options	Page 36
WHY	Guiding principles	Page 2
HOW	"How to" techniques for each of the core roles are learned through pre-service training and clinical practicum experiences. In-service learning continues via clinical fellowships, continuing education programs, literature review, mentorships, Special Interest Division or other professional affiliations, study groups, and research.	

I. Introduction

School-based speech-language pathology services have changed dramatically during the past decades because of numerous legislative, regulatory, societal, and professional factors. Meanwhile fiscal constraints and increased paperwork have made it more challenging to provide effective services. In order to provide appropriate speech and language services, it is important to understand and consider the corresponding changes in the development and management of the school-based speech-language pathology program.

The current roles and responsibilities of the school-based speech-language pathologist require clarification, expansion, and readjustment. Core roles and responsibilities are described in Section II, while additional roles and opportunities are suggested in Section III.

Purpose

The purpose of this document is to define the roles and delineate the responsibilities of the speech-language pathologist within school-based speech-language programs.

These guidelines were developed in response to requests by speech-language pathologists, school administrators, lobbyists, and legislators who seek guidance from the American Speech-Language-Hearing Association (ASHA) for a description of the roles and responsibilities of school-based speech-language pathologists.[1] These guidelines can be used as a model for the development, modification, or affirmation of state and local procedures and programs. Parents,[2] families,[3] speech-language pathologists, teachers, school administrators, legislators, and lobbyists may find the information helpful when advocating for quality services and programs for students with communication disorders. This document may also be used as a resource by program administrators and supervisors who wish to support and enhance the professional growth of individual speech-language pathologists.

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[1] The ASHA School Services Division receives approximately 100 requests each year for such guidelines. Many requests represent the interests of entire school districts or local and state education agencies. Additionally, requests for this type of information are received by other divisions at the ASHA National Office for use in state and federal advocacy efforts.

[2] Within this document *parent* refers to the biological parent(s), legal guardian(s), or surrogate parent(s).

[3] Within this document *family* may include relatives or individuals with a common affiliation, such as caregivers or significant others.

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Guiding Principles

The following premises guided the development of this document:

- "Disability is a natural part of the human experience and in no way diminishes the right of individuals to participate in or contribute to society. Improving educational results for children with disabilities is an essential element of our national policy of ensuring equality of opportunity, full participation, independent living, and economic self-sufficiency for individuals with disabilities." (U.S. Congress, 1997 [Sec. 601(c)]).[4]
- Society's trends and challenges affect the role of speech-language pathologists.
- Educational success leads to productive citizens.
- Language is the foundation for learning within all academic subjects.
- School-based speech-language pathologists help students maximize their communication skills to support learning.
- The school-based speech-language pathologist's goal is to remediate, ameliorate, or alleviate student communication problems within the educational environment.
- A student-centered focus drives team decision-making.
- Comprehensive assessment and thorough evaluation provide information for appropriate eligibility, intervention, and dismissal decisions.
- Intervention focuses on the student's abilities, rather than disabilities.
- Intervention plans are consistent with current research and practice.

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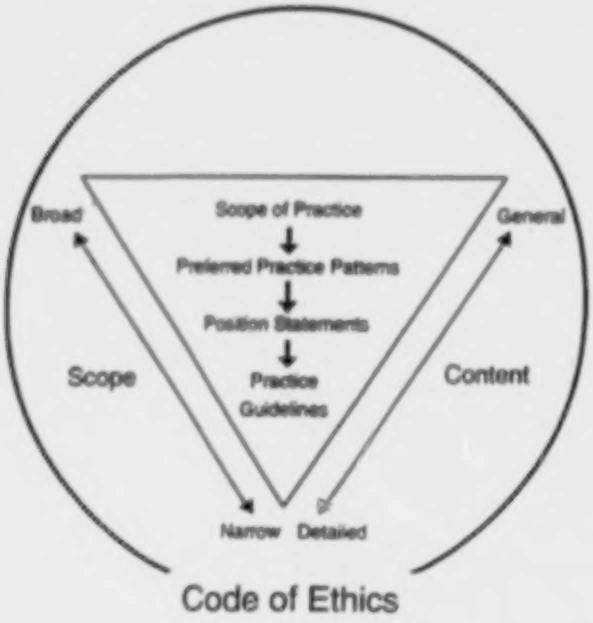
[4] Further citations of the U.S. Congress 1997 Amendments to the Individuals with Disabilities Education Act (IDEA) will be denoted by section numbers only. Unless otherwise stated, IDEA refers to the IDEA 1997 Amendments. At this writing, the final federal regulations for the IDEA 1997 legislation have not been promulgated by the Department of Education.

Although speech-language pathologists are bound by federal mandates, state regulations and guidelines, and local policies and procedures, they are also influenced by ASHA's policy statements. School-based speech-language pathologists are encouraged to refer to ASHA's Code of Ethics (Appendix A) when making clinical decisions. As indicated in Figure 1, ASHA's Code of Ethics encompasses all ASHA policy.

Figure 1. Conceptual Framework of ASHA Policy Statements.


Broad
Scope of Practice
Preferred Practice Patterns
Position Statements
Practice Guidelines
General
Scope
Content
Narrow
Detailed
Code of Ethics

Source: *Scope of Practice in Speech-Language Pathology.* (ASHA, 1996c)

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The guidelines in this document are consistent with ASHA's Scope of Practice, Preferred Practice Patterns, and position statements, yet are specific to issues relating to school-based speech-language pathologists. Additional complementary documents, such as ASHA guidelines, technical reports, tutorials, and relevant papers, are available through the ASHA National Office (see Appendix B).

These guidelines reflect the Committee's review of current law related to providing services to students with disabilities; policy and procedure documents from a variety of geographic areas; current professional literature; contemporary practices from rural, suburban, and urban areas; and extensive feedback from peer reviewers in the profession. Likewise, the terminology used within this document mirrors current widespread use; however, regional or geographical variations may occur. In the interests of clarity, the various aspects of school-based speech-language pathologists' roles and responsibilities are discussed separately. However, school-based speech-language pathology services are interrelated, as are all aspects of communication.

The field of speech-language pathology is dynamic and evolving, therefore the examples within this document are not meant to be all-inclusive. Additional emerging roles or responsibilities should not be precluded from consideration *if* they are based on sound clinical and scientific research, technological developments, and treatment outcomes data.

Definitions

The *range of the profession* of speech-language pathology has been defined by many sources, including ASHA, federal legislation, and such other sources as the World Health Organization.

ASHA Definition

Speech-language pathologists are professionally trained to prevent, screen, identify, assess, diagnose, refer, provide intervention for, and counsel persons with, or who are at risk for, articulation, fluency, voice, language, communication, swallowing, and related disabilities. In addition to engaging in activities to reduce or prevent communication disabilities, speech-language pathologists also counsel and educate families or professionals about these disorders and their management (ASHA, 1996c).

Federal Definitions

The Individuals with Disabilities Education Act (IDEA) includes *speech-language pathology* as both a related service and as special education. As *related services*, speech-language pathology is recognized as "developmental, corrective, and other supportive services. . .as may be required to assist a child with a disability to benefit from special education. . .and includes the early identification and assessment of disabling conditions in children" [Section 602(22)]. Speech-language pathology is considered *special education* rather than a related service if the service consists of "specially designed instruction, at no cost to the parents, to meet the unique needs of a child with a disability, including instruction conducted in the classroom, in the home, . . . and in other settings." State standards may further specify when speech-language pathology services may be considered special education rather than a related service.

According to the IDEA definition, speech-language pathology includes:

- identification of children with speech and/or language impairments
- appraisal and diagnosis of specific speech and/or language impairments
- referral for medical or other professional attention necessary for the habilitation of children with speech or language impairments
- provisions of speech and/or language services for the prevention of communication impairments or the habilitation of children with such impairments
- counseling and guidance for parents, children, and teachers regarding speech and/or language impairments.

IDEA similarly identifies the early intervention services provided by speech-language pathologists for children from birth to age 3 with communication or swallowing disorders and delays. In Part C of IDEA, early intervention services are defined as being "designed to meet the developmental needs of an infant or toddler with a disability in any one or more of the following areas: physical, cognitive, communication, social or emotional and adaptive development" [Section 632(c)]. An infant or toddler with a disability may also include, at a state's direction, *at-risk* infants and toddlers [Section 632(5-8)].

World Health Organization Definitions

School-based speech-language pathologists prevent, identify, assess, evaluate, and provide intervention for students with speech, language, and related impairments, disabilities, and handicaps. The World Health Organization, in an effort to describe what may happen in association with a health condition, defines *impairment*, *disability*, and *handicap* and differentiates outcome measures for each. See Table 1.

Table 1. World Health Organization (WHO) classifications.

	IMPAIRMENT	*DISABILITY*	*HANDICAP*
Definitions	Abnormality of Structure or Function at the Organ Level	Functional Consequences of an Impairment	Social Consequences of an Impairment or Disability
Examples	Speech, Language, Cognitive, or Hearing Impairments	Communication Problems in Context of Daily Life Activities	Isolation, Joblessness, Dependency, Role Changes
Outcome Measures	Traditional Instrumental and Behavioral Diagnostic Measures	Functional Status Measures	Quality of Life Scales, Handicap Inventories, Wellness Measures

Source: *International classification of impairments, disabilities, and handicaps*. (World Health Organization, 1980)

School-based speech-language pathologists focus on all three aspects of a student's communication needs: impairment, disability, and handicap. The school-based speech-language pathologist (a) prevents, corrects, ameliorates, or alleviates articulation, fluency, voice and language *impairments*; (b) reduces communication and swallowing *disabilities* (the functional consequences of the impairment); and (c) lessens the *handicap* (the social consequences of the impairment or disability).[5]

Ultimately, the school-based speech-language pathologist's purpose in addressing communication and related disorders is to effect functional and measurable change(s) in a student's communication status so that the student may participate as fully as possible in all aspects of life—educational, social, and vocational (ASHA, 1997e).

History

The roles and responsibilities of school-based speech-language pathologists have changed over the years in response to legislative, regulatory, societal, and professional influences.

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[5] The World Health Organization (1997) has drafted a revision of its classification of impairments, disabilities, and handicaps for field trials only. If finalized in current form, the dimensions will include impairments of structure and impairments of function, activities (formerly disabilities), and participation (formerly handicaps).

Traditional Role

School-based speech-language programs have a long history. Records indicate that in 1910 the Chicago public schools were the first schools to hire "speech correction teachers" (Darley, 1961). In the 1950s, speech-language pathologists who worked in a school setting, formerly referred to as "speech correctionists, " "speech specialists," or "speech teachers," worked primarily with elementary school children who had mild to moderate speech impairments in the areas of articulation, fluency, and voice. Later, with increased knowledge about language development, the "speech therapist" developed skills in identifying and remediating language disorders, thereby expanding the range of the profession (Van Hattum, 1982). Students were typically treated in large groups, contributing to caseload sizes that in most situations significantly exceeded those of today. The speech-language pathologist often employed a medical/clinical approach to treating students with communication impairments. With this approach the student's problems were diagnosed, developmental tasks were prescribed, clinical materials were used for treatment, and finally the individual was treated until the pathology was "corrected." All of this was most often conducted by pulling students out of the classroom to receive services within a separate therapy resource room. The emphasis was on correcting the specific speech or language impairment.

Legislative Influences

Federal and state governments have been instrumental in obtaining rights for children with disabilities through the authorization of public laws. Practices defining speech-language pathologists' roles and responsibilities in schools today have been shaped in part by the laws and regulations, administrative policies and procedures, and court rulings that govern the provision of services to students with communication disorders. Relevant federal laws are noted in Table 2.

Table 2. Federal statutes relating to education of students with disabilities.

Year	*Name of Law*	*Law #*	*Highlights*
1973	Section 504 of the Rehabilitation Act of 1973	PL 93-112	Civil rights law to prohibit discrimination on the basis of disability in public or private programs and activities receiving federal financial assistance.
1975	Education for All Handicapped Children Act of 1975 (EHA)	PL 94-142	Mandates a free, appropriate education for all handicapped students between the ages of 3 and 21. Provides for Individualized Education Programs (IEPs), due process, protection in evaluation procedures, and education in the least-restrictive environment.
1986	Education for All Handicapped Children Act (Part H)	PL 99-457	Extends protections of the EHA to infants and toddlers (birth to age 3) through the establishment of a formula grant program. An important component of early intervention is the comprehensive Individualized Family Service Plan (IFSP).
1990	Americans with Disabilities Act (ADA)	PL 101-336	A civil rights law to prohibit discrimination solely on the basis of disability by mandating reasonable accommodations across all public and private settings, including private and public schools.
1990	Individuals with Disabilities Education Act of 1990 (IDEA)	PL 101-476	(Includes birth through 21). Expands the discretionary programs, includes the additional categories of autism and traumatic brain injured as separate disability categories. Adds the statutory definitions of assistive technology device and service. Expands transition requirements.
1993	Goals 2000: Educate America Act of 1993	PL 103-85	Describes inclusion of children with disabilities in school reform effort. Develops eight National Education Goals. Ensures that students with disabilities are educated to the maximum extent possible.
1994	Improving America's Schools Act (IASA)	PL 103-382	Provides for professional development and lists competencies for all persons providing services, including related services and special education.
1997	Individuals with Disabilities Education Act Amendments of 1997	PL 105-17	Encourages participation of students with disabilities in the general education curriculum and state- and district-wide assessments. Encourages parental involvement in the IEP team placement decisions. Assures that communication and assistive technology needs of students are considered. Encourages use of voluntary mediation rather than attorneys and no cessation of services for disciplinary reasons if related to student's disability.

Source: U.S. Congress

As can be seen in Table 2, legislative changes have influenced many aspects of speech-language programs. Before the Education for All Handicapped Children Act of 1975 (EHA) and its focus on providing services in the least-restrictive environment, "one million of the children with disabilities were excluded entirely from the public school system and did not go through the educational process with their peers" [Section 601c (2C)]. Others with disabilities were in the public schools, but their disabilities were undetected; this prevented them from having a successful educational experience. With the lack of adequate services within the school system, families had to find services outside the public school system, often far from home and at their own expense [Section 601c (2D-E)]. EHA assured free appropriate public education for all students. It also increased accountability and documentation, which consequently has directly affected school-based speech-language pathologists.

Other legislation followed. With the enactment of EHA-Part H in 1986, services were expanded to include infants and toddlers and more categories of disabilities. IDEA, in 1990, further broadened the range of the profession with the addition of more discretionary programs. In 1993, Goals 2000: Educate America Act established eight national education goals (see Appendix C) and reinforced the notion that school reform legislation was relevant to speech-language pathology services (see Appendix D and ASHA, 1994i).

Goals 2000, Improving America's Schools ACT (IASA), and recent IDEA amendments all underscore the importance of post-secondary initial preparation and continuing professional development to ensure a high quality of education for students with disabilities. And most recently, the IDEA amendments of 1997 require that the IEP include information regarding the impact of the student's disability in terms of the general education curriculum.

In addition to federal legislative mandates, speech-language pathologists must also be familiar with and follow existing state regulations and guidelines and local policies and procedures in carrying out their roles and responsibilities.

Societal Influences

External factors other than legislative changes have influenced the roles of the school-based speech-language pathologist. America's racial and ethnic profile is rapidly changing with an attendant shift in student demographics. By the turn of the millennium, nearly one of every three Americans will be African-American, Hispanic, Asian-American or American Indian. As a group, minorities constitute an ever-larger percentage of public school students. In addition, the limited-English-proficient population is the fastest growing population in America [Section 601 (7A-F)]. The move toward pluralism—in which numerous distinct ethnic, religious, or cultural groups co-exist—has produced students who are culturally and linguistically more diverse. Hence, speech-language pathologists need to address such professional issues as nonbiased assessment and eligibility and intervention considerations related to a diverse population.

The nature and complexity of disorders have intensified. Speech-language pathologists within general education settings provide services for more students who are medically fragile and/or multihandicapped. The emphasis on least-restrictive environment only partially explains the increase. Medical advancements are saving more lives, yet many who survive are physically or medically challenged. Additionally, with health care reform, many students are released earlier from hospitals or rehabilitation centers and enter public schools requiring intensive speech-language services. Such other societal influences as an aging population and squeezed budgets have often translated to fiscal cutbacks to K-12 and postsecondary education programs (ASHA, 1997h). These fiscal constraints have made it more challenging to provide effective service.

Professional Influences

School-based speech-language pathologists possess a high degree of clinical competence by virtue of their professional study and experience. The field of speech-language pathology has developed a widened scope of practice. Research and efficacy studies have been conducted and published to help determine best practices relating to speech-language pathology in all settings and within schools in particular. Advanced technology has increased the scope and capabilities of speech-language pathologists.

Personnel shortages and changes in state licensure or department of education certification have affected the roles and responsibilities of school-based speech-language pathologists in many states. The roles of the speech-language pathologist may vary depending upon the composition or severity of the caseload, state or district mandates, and staffing needs.

Current Model

Although the mission of the school-based speech-language pathologist—to improve the communication abilities of students—has remained constant, the manner in which the school-based speech-language pathologist addresses prevention, assessment, evaluation, eligibility determination, caseload management, and intervention has changed and will continue to evolve.

Today's school-based speech-language pathologists serve students who have complex communication disorders, many of which require intensive, long-term interventions. Many school speech and language caseloads consist of students with a wide range of disabilities and diverse educational needs. According to the *Twentieth Annual Report to Congress on the Implementation of IDEA*, students with speech or language impairments are the second largest category of students served (20.2%) after specific learning disabilities (51.2%) (U.S. Department of Education, 1998). Speech-language pathologists also provide services to students with related disability categories—including mental retardation; emotional disturbance; multiple disabilities; hearing, orthopedic, visual, or other health impairments; autism; deaf-blindness; and traumatic brain injury.

Several educational reform initiatives have influenced and shaped the policies that we have today. The regular education initiative (REI) proposed that as many children as possible be served in the regular classroom by "encouraging a partnership with regular education" (Will, 1986, p. 20). Full-inclusion advocates went a step further and supported complete inclusion of students with special needs in the regular education classroom. Legislative mandates and general philosophical changes have dictated that special education be provided in the least restrictive environment (LRE). Careful consideration of LRE and meaningful curriculum modifications based on the students' needs have led to expanded service-delivery models. Now, in addition to taking students out of the classroom for services, the speech-language pathologist has an array of direct and indirect service-delivery options available to help students with communication disorders (see Table 6 on p. 40). To integrate speech and language goals with educational (academic, social/emotional, or vocational) objectives, direct intervention may take place in a variety of settings, including the general education or special education classroom, the speech-language treatment room, the resource room, the home, or community facility (ASHA, 1996b). Indirect service is also provided for professional staff, parents, and families.[6]

Contemporary speech-language pathologists not only provide assessment and intervention for students identified as having communication disorders, they also may recommend environmental modifications or strategies for communication behaviors of children who have not been identified as being eligible for special education or related services (see Prevention, p. 16).

With the expanding consulting role, it is essential for school-based speech-language pathologists to have a manageable caseload size. Adequate planning and conference time is needed during the school week to serve the student, educators, and parents appropriately.[7] (See Caseload Management, p. 36.)

Presently, the school-based speech-language pathologist is expected to fulfill a variety of roles (see Table 3 in Section II). The roles and responsibilities will vary in accordance with the work setting (e.g., home, community, preschool, elementary or secondary school), with the types of communication impairments and disorders exhibited by children in these settings, and with the speech-language pathologist's experience, knowledge, skills, and proficiency. The level of experience, knowledge, skills, and proficiency may be expanded through additional training, such as mentoring, teaming, peer coaching, co-teaching, or through continuing education (CE) opportunities (workshops, seminars, institutes, and course work).

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[6] According to the results of the ASHA Schools Survey, 80% of the speech-language pathologist's time is spent in providing direct intervention and diagnostics. The remaining 20% is spent on such activities as meetings, paperwork, training, and travel between schools (ASHA, 1995c).

[7] ASHA's recommended *maximum* caseload size is 40 students regardless of the type or number of service delivery models selected (ASHA, 1993b).

School-based speech-language pathologists keep current with best practices in assessment and intervention. When providing services for students with impairments, disabilities, and/or handicaps, speech-language pathologists (a) work with students with speech, language, hearing, and swallowing or related **impairments**, (b) promote the development and improvement of functional communication skills for students with communication and swallowing **disabilities**; and (c) provide support in the general educational environment for students with communication **handicaps** to facilitate their successful participation, socialization, and learning. School-based speech-language pathologists' roles and responsibilities have evolved. They now include preparing students for academic success and the communication demands of the work force in the 21st century as well as alleviating handicapping conditions of speech and language disorders (ASHA, 1994i).

In the future, research and outcomes data most certainly will alter assessment and intervention techniques, influence models and theories of practice, and further expand ASHA's Scope of Practice (1996c) and Preferred Practice Patterns for the Profession (1997e).

II. Roles and Responsibilities

This section describes specific roles and responsibilities of school-based speech-language pathologists. Table 3 on the following page provides an outline of the various core roles and related responsibilities discussed in this section. Note that specific responsibilities may be shared by other members of teams[6] working together to meet the educational and communication needs of students with disabilities and their families. (Additional roles and opportunities are discussed in Section III).

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[6] IDEA encourages team evaluations and decision making. School-based teams may be multidisciplinary, interdisciplinary, or transdisciplinary in philosophy, depending upon the setting, members, and the purpose of the team. Krumm, Aussant, Barcomb, Low, Lunday, and Schmiedge (1997) define each of these types of teams as follows:

Multidisciplinary: One person heads the team, but each member communicates regarding his or her own discipline. Knowledge of skills of other professions is minimal, and team members assume that the other professionals know the right thing to do. Evaluation overlap is minimal.

Interdisciplinary: Team members communicate freely across disciplines. Team members have substantial knowledge of other team areas regarding testing and test results. Some redundancy of testing occurs.

Transdisciplinary: Several professionals support and consult with one implementor. Team is holistic and expands focus to parents and community. (This model is consistent with early intervention program philosophy.)

For consistency, "interdisciplinary" will be used throughout this document.

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Table 3. Core roles and responsibilities of school-based speech-language pathologists.

Core Roles	**Responsibilities**
	Intervention Assistance Team / Child Study Team
PREVENTION	Inservice Training Consultation
IDENTIFICATION	Prereferral Interventions Screening: Hearing, Speech, and Language Referral and Consent for Evaluation
	Interdisciplinary Team
ASSESSMENT (Data Collection)	Assessment Plan Assessment Methods Student History Nonstandardized Assessment Standardized Assessment
EVALUATION (Interpretation)	Strengths/Needs/Emerging Abilities Disorder/Delay/Difference Severity Rating Educational Relevance: Academic, Social-Emotional, and Vocational Factors Evaluation Results and Team Recommendations Specific Evaluation Considerations Age Attention Central Auditory Processing Cognitive Factors Cultural and/or Linguistic Diversity/Limited English Proficiency Hearing Loss and Deafness Neurologic, Orthopedic, and Other Health Factors Social-Emotional Factors
	IEP Team
ELIGIBILITY DETERMINATION	Federal Mandates, State Regulations/Guidelines/Local Policies/Procedures Presence of Disorder Educational Relevance Other Factors
IEP/IFSP DEVELOPMENT	Federal Mandates, State Regulations/Guidelines/Local Policies/Procedures IEP Team, Factors, Components, Caseload Size
CASELOAD MANAGEMENT	Coordination of Program Service-Delivery Options Scheduling Students for Intervention Caseload Size

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Core Roles	Responsibilities
	Educational Teams
INTERVENTION	For Communication Disorders
	General Intervention Methods Scope of Intervention Communication Language Speech: Articulation/Phonology, Fluency, Voice/Resonance Swallowing
INTERVENTION	For Communication Variations
	Limited English Proficiency Cultural and/or Linguistic Diversity Students Requiring Technology Support
COUNSELING	Consultation Referral
	IEP Team
RE-EVALUATION	Triennial Annual Ongoing
TRANSITION	Between levels (birth to 3, preschool, elementary, secondary) Secondary to post-secondary education or employment More-restrictive to less-restrictive settings
DISMISSAL	Federal Mandates, State Regulations/Guidelines /Local Policies/Procedures Presence of Disorder Educational Relevance Other Factors
	Speech-Language Pathologist
SUPERVISION	Clinical Fellows Support Personnel University Practicum Students Volunteers
DOCUMENTATION AND ACCOUNTABILITY	Federal Mandates, State Regulations/Guidelines/Local Policies/Procedures Third-Party Documentation Treatment Outcome Measures Performance Appraisal Risk Management

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Prevention

The concept of prevention has broadened in scope in speech-language pathology in the last 20 years. Prevention now includes more than speech improvement and language stimulation; it encompasses providing information on general health maintenance, environmental hazards, and prenatal factors, in addition to early identification and intervention.

The school-based speech-language pathologist has an important role to play on the educational team in addressing prevention of communication disorders. For the school-based provider, this may include consultation regarding the acquisition of proficient language and communication skills by students in general education preschool and early intervention classrooms. The school-based speech-language pathologist's active involvement in general education support will promote increased awareness that communication skills are the basis of most teaching, learning, and social relationships (ASHA, 1994i; Cazden, 1988; Nelson, 1989).

Although intervention for students with communication disorders is still the primary role, this emphasis on prevention suggests an expanding role for the school-based speech-language pathologist that goes beyond identification and intervention for children with speech and language disorders (ASHA, 1991c; Butler, 1996; Connecticut State Department of Education, 1993; Kavanaugh, 1991). Prevention requires increased efforts to avoid or minimize the onset or development of communication disorders and their causes (ASHA, 1997d, 1997e). The causes are often characterized as biological, environmental, or multifactorial. In the latter case, the environment interacts with genetic predisposition. This terminology, as well as primary, secondary, and tertiary prevention, are defined in ASHA's Prevention of Communication Disorders Tutorial (1991c) and are discussed below.

Primary Prevention: The elimination or inhibition of the onset and development of a communication disorder by altering susceptibility or reducing exposure for susceptible persons.

The emphasis of primary prevention is on eliminating or reducing biological and environmental risk factors through disseminating prevention information to parents, families, educational personnel, health care and social service professionals, organizations, and policy-making groups. Students who do not qualify for services under IDEA may benefit from the services of the school-based speech-language pathologist who provides primary prevention services.

Primary prevention activities may range from individual conferences to school-wide or community inservice. They may include educating and collaborating with parents, families, educators, administrators, and the community regarding:

- classroom strategies that will enhance communication for all students
- injury/accident prevention (e.g., wearing seat belts or bicycle helmets)
- fluency-enhancing strategies
- prevention of vocal abuse
- students' lifestyle choices affecting their communication skills and that of their offspring

Secondary Prevention: The early detection and treatment of communication disorders. Early detection and treatment may lead to the elimination of the disorder or the retardation of the disorder's progress, thereby preventing further complications.

*Tertiary Prevention: the reduction of a disability by attempting to **restore** effective functioning. The major approach is **rehabilitation** of the disabled individual who has realized some residual problems as a result of the disorder.*

Early screening, assessment, and treatment of an impairment—traditionally considered special education or related services—may actually prevent further disability or handicapping conditions. Such secondary and tertiary prevention activities are included in the following sections on Identification, Assessment, and Intervention.

Identification

A core role of the speech-language pathologist is to participate as a member of a team in identifying students who may be in need of assessments to determine possible eligibility for special education or related services. These assessments assist in determining the presence of disabilities and eligibility/ineligibility for special education and related services under IDEA. It is necessary for the speech-language pathologist to examine the identification and assessment/evaluation process through the prism of legal and ethical codes, policies, procedures, and guidelines specific to the state or local education agency.

The basic phases of the identification process are prereferral, screening, and referral when indicated.

Prereferral

Although not always required, the prereferral process is a recommended option in many districts as a first step in deciding whether a student is in need of referral for a special education and related services evaluation or simply needs assistance or modification within the general education environment. Many schools establish educational problem-solving teams, often referred to as a Child Study Team, Intervention Assistance Team, or Student Success Team. These teams are defined as school-based problem-solving groups whose purpose is to assist teachers with intervention strategies for addressing the learning needs and interests of students before a formal referral for an evaluation (Ohio Department of Education, 1991). This process is consistent with IDEA. The emphasis is on classroom modifications and supports that, when successful, actually prevent the need for special education intervention. Team members collaborate to determine if accommodations or modifications have been successful. An effective method is using dynamic assessment to gauge a student's potential to learn independently when given a mediated learning experience (see Assessment Methods p. 20 and Intervention sections, pp. 39, 51). Some schools have more than one team. The first-level team is responsible for the prereferral process and documentation of general education intervention implemented in the classroom, whereas a second-level team is responsible for the assessment and identification process, when recommended.

A core prereferral team may consist of any combination of the following: an administrator; the student's teacher; one or more other regular education teachers; a curriculum specialist; and student or pupil service personnel, as appropriate, such as the school psychologist, social worker, counselor, or nurse. Parents/families may also participate on prereferral teams. The composition of a prereferral team varies considerably among districts and states. Some teams are limited to general education staff, while others include special education and related service staff. One or more special education or related service providers may be added as necessary for specific student concerns. The speech-language pathologist may consult regarding perceived communication needs of students who may benefit from classroom accommodations or special education services. During the prereferral phase, it may be the responsibility of the speech-language pathologist, as a team participant, to provide one or more of the following services as appropriate for specific students:

- review pertinent school records
- collect and review data to substantiate the outcomes of attempted classroom modifications and interventions
- observe the student in the classroom
- collaborate with parents, teachers, and other professionals to provide strategies, resources, and additional recommendations for teacher interventions in the classrooms
- demonstrate intervention strategies, procedures, and techniques
- provide follow-up consultation or participate in processing a formal referral for assessment
- gather additional data

Screening

Screening is the process of identifying candidates for formal evaluation. Any procedure that separates those students in need of further evaluation from those not needing evaluation fulfills the purpose of screening. Screening may be accomplished by using published or informal screening measures administered by the speech-language pathologist. In some states, trained support personnel may conduct the screening under the direction of the speech-language pathologist, who then interprets the measures. Nonstandardized checklists, questionnaires, interviews, or observations interpreted by the speech-language pathologist may also be considered screening measures. Individual or mass speech/language screenings may be mandatory in some regions and optional in others. If and when it is the responsibility of the school-based speech-language pathologist to conduct the screenings, the speech-language pathologist:

- selects screening measures meeting standards for technical adequacy
- administers and/or interprets a speech/language screening
- administers and/or interprets a hearing screening in accordance with state and local policy, procedures and staffing patterns

(ASHA, 1997e)

Referral

When accommodations and interventions have been attempted but have not been successful, a referral for assessment may be initiated by any individual, including a parent, teacher, or other service provider. The referral is a request for assessment of a student with suspected special education needs. The assessment focuses on all areas related to a suspected disability that may result in eligibility for special education and/or related services. The written referral includes a brief description of any previously attempted supplementary aids and services, program modifications and supports to the general education environment, a statement regarding the effectiveness of those modifications, and a rationale for the assessment.

If a speech-language pathologist is a member or case manager of a team, in accordance with local policies, it may be the responsibility of the speech-language pathologist to:

- review referrals
- participate in the development of the assessment plan
- obtain the results of current hearing/vision screenings and monitor follow-up when appropriate
- initiate referrals for additional assessment to other service providers
- serve as liaison to appropriate nonpublic school agencies and/or providers
- communicate with general education classroom teacher(s) and parent(s) regarding the status of the referral
- schedule referral meetings
- obtain written parent/guardian consent for evaluation in accordance with federal mandates, state regulations and guidelines, and local policy and procedures
- complete and distribute the paperwork to process the referral

Assessment

A core role of the school-based speech-language pathologist is to conduct a thorough and balanced speech, language, or communication assessment. Within this document, a distinction is made between the role of assessment and the role of evaluation. *Assessment* "refers to data collection and the gathering of evidence," whereas *evaluation* "implies bringing meaning to that data through interpretation, analysis and reflection" (Routman, 1994, p. 302).

A responsibility of the school-based speech-language pathologist is to select assessment measures that:

- are free of cultural and linguistic bias
- are appropriate for the student's age
- match the stated purpose of the assessment tool to the reported needs of the student
- describe differences when compared to peers
- describe the student's specific communication abilities and difficulties
- elicit optimal evidence of the student's communication competence
- describe real communication tasks

(See Appendix E.)

Assessment Plan

A comprehensive assessment plan is developed within local or state mandated time lines. It documents the areas of speech and language to be assessed, the reason for the assessment, and the personnel conducting the assessment. If an initial screening was completed, the results are used to identify the specific areas of speech and language to be addressed. The student's dominant language and level of language proficiency are specified in the assessment plan. Parents may participate in the development of the assessment plan. The written assessment plan is provided to parents in their dominant language or native language, whenever possible, as per IDEA [Section 612(a)(6)(B)]. (See specific evaluation considerations, p. 25)

Assessment Methods

The foundation of a quality, individualized assessment is to establish a complete student history. That information will direct subsequent assessment selection. The assessment data should reflect multiple perspectives. No single assessment measure can provide sufficient data to create an accurate and comprehensive communication profile (Haney, 1992; IDEA [Section 612(a)(6)(B)]). Conducting both nonstandardized and standardized assessments enables the speech-language pathologist to view the student in settings with and without contextual support.

Combining standardized (norm-referenced) with nonstandardized (descriptive) assessment using multiple methods will assure the collection of data that can furnish information about the student's functional communication abilities and needs. Examples of descriptive assessment methods are checklists and developmental scales, curriculum-based assessment, dynamic assessment data, and portfolios of authentic assessment data[9] (e.g., student classroom work samples, speech and language samples, and observations of the student in various natural contexts). A descriptive assessment allows focus on language during actual communicative activities within natural contexts.

During assessment data collection, it is the responsibility of the speech-language pathologist to gather information, select appropriate assessment methods, and conduct a balanced assessment.

This balanced assessment may include:

- gathering information from parent(s), family, student, teachers, other service-provider professionals and paraprofessionals
- compiling a student history from interviews and thorough record review
- collecting student-centered, contextualized, performance-based, descriptive, and functional information
- selecting and administering reliable and valid standardized assessment instruments that meet psychometric standards for test specificity and sensitivity

Examples of each follow.

Parent/staff/student interviews. Parents are an essential source of information—especially for students who are very young or who have severe disabilities. Parents provide insight regarding communication skills in various settings outside the school and provide additional information about functional and developmental communication levels.

Classroom teachers, instructional assistants, and other school professionals are a primary source of information regarding a student's functional communication skills among peers within the classroom and school environment. They also provide specific information regarding listening, speaking, reading, writing, spelling/invented spelling, and the relationship between the student's communication skills and the curriculum. Various teacher/staff checklists provide information specific to disability areas or communication functions.

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[9] *Authentic* refers to real-life activities and situations.

Student interviews are appropriate in many cases, depending upon the student's age or cognitive level. The speech-language pathologist may gain insight into personal attitudes of the student related to communication difficulties and motivation to change.

Student history. The speech-language pathologist collects relevant and accurate information through record review, observation, and parent, teacher, or student interviews. Information regarding the student's medical and family history, communication development, social-emotional development, academic achievement from previous educational placements, language dominance, community/family language codes and social-behavioral functioning are especially valuable when completing a student case history.

Checklists and developmental scales. These tools are used to obtain a large amount of information in an organized or categorized form to note the presence or absence of specific communication behavior. They may be completed either by the speech-language pathologist or by others for the speech-language pathologist.

Curriculum-based assessment. Curriculum-based assessment (CBA) refers to the "use of curriculum contexts and content for measuring a student's language intervention needs and progress" (Nelson, 1998). Nelson suggests that CBA may extend the assessment beyond the identification of a student as communication impaired by including activities/skills that may assess the acquisition of effective oral and written communication abilities.

An example of a curriculum-based measure that may be used by the speech-language pathologist is an information reading inventory that could be analyzed collaboratively by the speech-language pathologist and the classroom teacher.

Dynamic assessment. Dynamic assessment is defined as a "term used to identify a number of distinct approaches that are characterized by guided learning for the purpose of determining a learner's potential for change" (Palincsar, Brown, & Campione, 1994). Dynamic assessment is concerned with how well a student can perform after being given assistance. The response the student makes to assistance helps to determine future effective instruction (see Intervention, pp. 39, 51).

Portfolio assessment. *Portfolio assessment* can be defined as a collection of such products as student work samples, language samples, dictations, writing samples, journal entries, and video/audio recordings and transcriptions. A portfolio approach requires decisions regarding:

- what samples are included
- how many samples are included
- student reflections on his or her work over time
- analysis of the underlying processes represented by the samples as either learned or not learned

Observation/anecdotal records. The observation of real-life communication behavior and the application of the resulting data describe language development and function in a variety of natural contexts. The speech-language pathologist can also use the anecdotal records and observations conducted by other individuals to complete various checklists, surveys, and developmental scales.

Standardized assessment information. When appropriately selected for validity and reliability, standardized tests yield important information regarding language and speech abilities and are part of the comprehensive assessment. They are norm-referenced and used to compare a specific student's performance with that of peers. Statistical scores are valid only for students who match the norming population described in the test manual.

Although all areas of speech, language, and communication are interrelated, broad spectrum, norm-referenced tests may be used to measure such skills of language comprehension and production as syntax, semantics, morphology, phonology, pragmatics, discourse organization, and following directions. Additional tests may be administered to assess such specific areas as auditory abilities and auditory processing of language. Tests are used to assess articulation, phonology, fluency, and voice/resonance; and instrumental and noninstrumental protocols are used to assess swallowing function.

The assessment data are compiled, records are reviewed, and observations and interviews are noted. The best means to valid, nonbiased testing may be a speech-language pathologist with a solid knowledge base in speech and language development, delay, difference, and disorders who understands the value and the inherent obstacles of standardized and nonstandardized assessments and who possesses the skills to analyze data generated through all assessment methods.

Evaluation

Once the comprehensive assessment has been completed, the results are interpreted. It is the interpretation that gives *value* to the assessment data, hence the term *evaluation* (Routman, 1994). Consideration is given to the nature and severity of a student's disorder and its effect on educational and social performance. Clinical judgment is used when evaluating assessment information. Informed decisions are made about eligibility and subsequent intervention strategies.

It is the responsibility of the speech-language pathologist, as part of a team, to assist in interpreting data that will:

- identify strengths, needs, and emerging abilities
- establish the presence of a disorder, delay, or difference—including determining the student's communication abilities within the context of home and/or community
- determine a severity rating (when required by state regulations and guidelines or local policy and procedures)
- define the relationship between the student's level of speech, language, and communication abilities and any adverse effect on educational performance
- determine if the communication disability is affected by additional factors influencing the results of the communication assessment
- summarize evaluation results and make recommendations

The speech-language pathologist's responsibilities in specific areas are described below:

Communication Strengths and Needs

A careful analysis of the assessment data reveals the student's strengths, needs, and emerging abilities. These may include differences between receptive and expressive oral and written language skills. Analysis may also reveal differences in the components of language *form* (phonologic, morphologic, and syntactic systems), *content* (semantic system), or *function/use* of language in communication (pragmatic system).

Strengths, needs, and emerging abilities are also identified within specific speech areas including articulation/phonology, fluency, and voice or resonance. The student's preferred communication modality is also considered. Identifying communication strengths and needs as prognostic indicators assists in determining the probable potential for remediation and creates a direct link from assessment to planning and conducting intervention. These strengths and needs are considered within the broader context of classroom, home, and community.

Disorder, Delay, or Difference

Research on the sequence and process of normal language and speech development provides the framework for determining whether the student exhibits a communication disorder, delay, or difference (see Appendix F, Developmental Milestones). Although the distinction among disorder, delay, and difference is not always easily determined, the following ASHA definitions are provided to clarify the terms.

A communication *disorder* is an impairment in the ability to send, receive, process, and comprehend verbal, nonverbal, and graphic symbol systems. A communication disorder may be evident in the process of hearing, language, or speech; may be developmental or acquired; and may range in severity from mild to profound. A communicative disorder may result in a primary disability or it may be secondary to other abilities (ASHA, 1993a, p. 40).

A communication *delay* exists when the rate of acquisition of language or speech skills is slower than expected according to developmental norms; however, the sequence of development is following a predicted order (Nicolosi, 1989). For eligibility purposes, determination of the level of delay that is considered significant is specified in state regulations and guidelines or local policies and procedures.

A communication *difference* is a "variation of a symbol system used by a group of individuals that reflects and is determined by shared regional, social, or cultural/ethnic factors. A regional, social, cultural, or ethnic variation of a symbol system is not considered a disorder of speech or language" (ASHA, 1993a, p. 41).

Severity Rating

A severity rating scale provides a consistent method of describing overall communication functioning. Many states have developed and published severity rating scales to help substantiate eligibility or dismissal criteria. Some states use the determined severity rating as a "best practice" guide to assist in determining a recommended amount of intervention per week. An example of a matrix based on severity was developed by the Illinois State Board of

Education (see Appendix G). Obviously, the **needs of the student** and **clinical judgment** affect the amount of service that the student receives. Consult state regulations and guidelines or local policies and procedures for severity rating information.

Educational Relevance

Education takes place through the process of communication. The ability to participate in active and interactive communication with peers and adults in the educational setting is essential for a student to access education (Michigan Speech-Language-Hearing Association, 1995). In order for a communication disorder to be considered a disability within a school-based setting, it must exert an adverse effect on educational performance. The speech-language pathologist and team determine what effect the disorder has on the student's ability to participate in the educational process. The educational process includes preacademic/ academic, social-emotional, and vocational performance.

A speech, language, or hearing disorder may severely limit a student's potential vocational or career choices regardless of the student's other competencies. (See Appendix H for examples of signs and effects of communication disorders and Appendix I for an example of a chart to document educational relevance.)

Evaluate Results and Make Recommendations

Many factors affect a child's learning. Some of these include quality of instruction; emotional status; home environment/support; family attitudes toward school services; composition of the classroom; characteristics of the teacher; educational history; and the student's planning, attention, and simultaneous and sequential processing abilities. The student's communication competence is evaluated in the context of the student's history and educational environment. All aspects of the assessment and evaluation are documented within the evaluation report. The speech and language information may be written in a self-contained communication report or may be included in a unified team report. The report interprets, summarizes, and integrates all relevant information that has been gathered. It describes the student's present level of functioning in all speech, language, and hearing areas and the relationship to the student's academic, social-emotional, and/or vocational performance.

The evaluation report serves as the basis for the team's discussion of alternatives and recommendations. It includes the following information:

- student history information from record review and parent, teacher, and/or student interview
- date(s) of assessment(s)
- relevant behaviors noted during observation
- assessment information from all disciplines
- observation/impressions in a variety of communication settings
- results of previous interventions
- descriptive assessment results
- standardized assessment results and documentation of any variations from standard administration
- discussion of student's strengths, needs, and emerging abilities

- disorder/delay/difference determination, including the student's communication abilities within the context of home and community
- severity rating (when applicable)
- educational relevance, including academic, social-emotional, and vocational areas
- interpretation/integration of all assessment data
- evaluation results and recommendations for strategies, accommodations, and modifications

Specific Evaluation Considerations

When interpreting the assessment data, consideration is given to the effect of specific factors influencing the results of the communication evaluation. Numerous relevant factors follow in alphabetical order.

Age

Chronological age and developmental level are considered during assessment and evaluation. School-based speech-language pathologists assess individuals from birth through age 21. The validity of standardized tests varies among instruments and across age levels. Careful observation and use of nonstandardized procedures assure a balanced assessment regardless of whether the assessment is conducted with infants and toddlers, preschool and/or elementary school children, or secondary school adolescents. Dynamic and authentic assessment data for all age levels provide information on the student's functional abilities or needs and potential to learn.

Speech-language pathologists involved in infant/toddler and preschool assessment should have an understanding of the health issues and effects of hospital stay on the child and the family, have access to a complete medical history, communicate with medical personnel, and should interview an affected child's family as part of a family-based assessment so that a detailed developmental history can be obtained. School-based speech-language pathologists charged with responsibility for early identification and preschool students need to be sensitive to the wide variation in family systems and interactive styles surrounding successful communication and language development, as well as have knowledge of all aspects of "normal" development. With respect to assessment and evaluation, speech-language pathologists assume the ongoing monitoring of a child's communication, language, speech, and oral-motor development. Because young children change rapidly and families respond differently to their children at various periods in development, speech-language pathologists devise systematic plans for periodic evaluation of progress (ASHA, 1989b).

Comprehensive evaluation of school-age children and adolescents includes assessment of the understanding and use of both oral and written language, including pragmatic abilities (Damico, 1993; Nippold, 1993). Intervention strategies reflect the student's changing developmental stages and language needs/proficiencies throughout elementary and secondary educational programs (Larson, McKinley, & Boley, 1993; Nelson, 1998; Work, Cline, Ehren, Keiser, & Wujeck, 1993).

Attention

Attentional behaviors and activity levels differ across ages, genders, and cultural background (ASHA, 1997e). The student's ability to focus and attend during the assessment is considered when evaluating the results of the assessment. The effectiveness of modifications used during an assessment are documented. Information about the type and extent of variation from standard test conditions are included in the evaluation report. This information is used by the team to evaluate the effects of variances on validity and reliability of the reported information.

Speech-language pathologists and audiologists are increasingly involved with students with attention deficit hyperactivity disorders (ADHD). These professionals are often among the first to assist in the evaluation of students and youth suspected of having ADHD because of its co-occurrence with language learning disabilities and central auditory processing disorders (ASHA, 1997f).

Attention deficit hyperactivity disorder is a syndrome characterized by serious and persistent difficulties in terms of (a) inattention and (b) hyperactivity-impulsivity. According to the *Diagnostic and Statistical Manual* (DSM-IV) of the American Psychiatric Association (1994), to confirm a diagnosis of ADHD, at least six characteristics within either category "must have persisted for six months to a degree that it is maladaptive and inconsistent with developmental level" (p. 84).[10]

An inattentive student may not exhibit hyperactive or impulsive characteristics and, therefore, may be overlooked in the classroom. That student may be at higher risk for educational failure than the student with hyperactive and/or impulsive tendencies because the student's needs are not apparent.

Some professionals assert that hyperactive/impulsivity behaviors may not be due to inattention but caused instead by poor inhibition or poor self-regulation (Barkley, 1990; Westby, 1994). This may be related to executive function, which is discussed further in ASHA's technical report on ADHD (1997f).

A diagnosis of ADHD is made by medical professionals only after ruling out other factors related to medical, emotional, or environmental variables that could cause similar symptoms. Therefore, physicians, psychologists, educators and speech-language pathologists conduct a comprehensive evaluation, which includes medical studies, psychological and educational testing, speech-language assessment, neurological evaluation, and behavioral evaluations compiled by both the parent and teacher(s). The student's performance should be assessed across multiple domains in multiple settings by several persons. A differential diagnosis is difficult because of the complex interaction existing between ADHD and cognitive, metacognitive, linguistic, social-emotional, and sensori-integrative abilities.

Central Auditory Processing

A Central Auditory Processing Disorder (CAPD) is an observed deficiency in sound localization and lateralization, auditory discrimination, auditory pattern recognition, temporal aspects of audition, use of auditory skills with competing acoustic signals, and use of auditory skills with any degradation of the acoustic signal (ASHA, 1995a). CAPD may affect language learning and language use as well as cognitive language processing areas (e.g., attention, memory, problem solving, and literacy). According to Chermak, "The behavioral profiles of students with CAPD, specific learning disabilities and ADHD often overlap, as might be expected given the complex interactions among auditory processing, language skills, cognition, and learning" (1995, p. 208). CAPD may be evident in combination with other disabilities, making differential diagnosis difficult.

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[10] The previous edition, DSM-III, made a distinction between undifferentiated attention deficit disorder (ADD) and ADHD. DSM-IV uses ADHD with the two subcategories noted above.

The assessment of central auditory processing disorders (CAPD) is a crossover area between the two professions of audiology and speech-language pathology and requires a cooperative effort among parents, teachers, speech-language pathologists, audiologists and other professionals for a successful outcome. Speech-language pathologists contribute to the assessment process by formally evaluating receptive language and phonemic processing skills and by documenting observed auditory processing behaviors. This information is used by the audiologist to augment the formal central auditory processing assessment battery (Keith, 1995). ASHA has established preferred practice patterns in CAPD assessment and treatment for both professions (ASHA, 1997d, 1997e). The current developments in CAPD are described in *Central Auditory Processing: Current Status of Research and Implications for Clinical Practice* (ASHA, 1995a).

Cognitive Factors

Cognition and language are intrinsically and reciprocally related in both development and function. An impairment of language may disrupt one or more cognitive processes; similarly, an impairment of one or more cognitive processes may disrupt language. Cognitive-based impairments of communication are referred to as cognitive-communicative impairments and are disorders that result from deficits in linguistic and nonlinguistic cognitive processes. They may be associated with a variety of congenital and acquired conditions (ASHA, 1988; 1991b). Speech-language pathologists are integral members of interdisciplinary teams engaged in the identification, diagnosis, and treatment of persons with cognitive-communicative impairments (ASHA, 1987).

The role of the school speech-language pathologist in evaluating the communication needs of students with cognitive-communicative impairments is delineated in the *Guidelines for Speech Language Programs* (Connecticut State Department of Education, 1993, pp. 90-91). Examples include:

- collaborating with families, teachers, and others in locating and identifying children whose communication development and behavior may suggest the presence of cognitive impairments or whose communication impairments accompany identified cognitive impairments
- collaborating with other professionals to interpret the relationship between cognitive and communication abilities
- assessing communication requirements and abilities in the environments in which the student functions or will function (Cipani, 1989)

- assessing the need for assistive technology in collaboration with audiologists including alternative/augmentative communication systems and amplification devices (Romski, Cevcik, & Joyner, 1984; Flexer, Millin, & Brown, 1990, Baker-Hawkins & Easterbrooks, 1994).

Cultural and/or Linguistic Diversity

The demographics of our society are changing rapidly and dramatically. The number of students with cultural and/or linguistic diversity is increasing in school systems across the nation, especially in large cities. In some states, over 40% of residents come from culturally and linguistically diverse backgrounds (California Speech-Language-Hearing Association, 1996). It has been estimated that in the near future one third of the U.S. population will consist of racial and ethnic minorities [IDEA Section 601(7)(A-D)]. The American Speech-Language-Hearing Association's position paper on social dialects (ASHA, 1983) emphasizes the role of the speech-language pathologist in distinguishing between dialects or differences and disorders. Additionally, the Office of Multicultural Affairs has developed a related reading list on this topic (ASHA, 1997a).

Responsibilities relating to assessment of students with culturally and linguistically diverse backgrounds include:

- reviewing the student's personal history, including cultural, linguistic, and family background
- assisting instructional staff in differentiating between communication disorders and culturally or linguistically based communication differences
- determining difference/disorder distinctions of a dialect-speaking student and recommending intervention only for those features or characteristics that are disordered and not attributable to the dialect

Limited English Proficiency

School-based speech-language pathologists play an important role in determining appropriate identification, assessment, and academic placement of students with limited English proficiencies (Adler, 1991; ASHA, 1998f). Prereferral interventions using Interventinon Assistance Teams are used to address student, teacher, curriculum, and instruction issues (Garcia & Ortiz, 1988). The differing mores, cultural patterns, and—particularly—the linguistic behaviors of these students require input from their family members and a culturally sensitive and competent team of professionals, which may include bilingual speech-language pathologists, teachers, English as a Second Language (ESL) staff, interpreters/translators, and/or assistants (Cheng, 1991; Langdon, Siegel, Halog, & Sanchez-Boyce, 1994; Leung, 1996). Many speech-language pathologists are trained to distinguish students who have a communication disorder in their first (also called home or native) language (L-1) from students who may be in the process of second language (L-2) acquisition. The speech-language pathologist who has not had such training must seek consultation with knowledgeable individuals.

In order to effectively distinguish difference from disorder in bilingual children, it is important for speech-language pathologists to understand the first as well as the second language acquisition process and to be familiar with current information available on the morphological, semantic, syntactic, pragmatic, and phonological development of children from a non-English language background. Assessment includes measuring both social language and academic language abilities. Proficiency in social language may develop within the first 2 years of exposure to English, whereas it may take an additional 5 years for academic language proficiency to develop. Basic interpersonal communication skills (BICS) are the aspects of language associated with the basic communication fluency achieved by all normal native speakers of a language (social language). Cognitive academic linguistic proficiency (CALP), on the other hand, relates to aspects of language proficiency strongly associated with literacy and academic achievement (Cummins, 1981).

There are approximately 200 languages spoken in the United States (Aleman, Bruno, & Dale, 1995). Within each group of students whose first language is other than English, there is also a continuum of proficiency in English (ASHA, 1985a). In evaluating speakers of languages other than English, some of whom may be accustomed to more than two languages, the continuum is particularly relevant. The continuum of English language learners includes speakers who fall within the following designations:

- bilingual English proficient (proficient in L-1 and L-2)
- limited English proficient (proficient in L-1, but not L-2)
- limited in both English and the primary language (limited in L-1 and L-2)

A further caution regarding bilingual evaluation is that if a test was *not* normed on bilingual or limited-English-proficient students, then the test norms may *not* be used for a bilingual or limited-English-proficient student (Langdon & Saenz, 1996). Responsibilities related to bilingual assessment may include:

- serving as a member of the interdisciplinary prereferral team when there is concern about a limited-English-proficient student's classroom performance
- seeking collaborative assistance from bilingual speech-language pathologists, qualified interpreters, ESL staff, and families to augment the speech-language pathologist's knowledge base (ASHA, 1998f)
- teaming with a trained interpreter/translator to gather additional background information, conduct the assessment, and report the results of assessment to the family (Langdon et al., 1994)
- compiling a history including immigration background and relevant personal life history such as a separation from family, trauma or exposure to war, the length of time the student has been engaged in learning English, and the type of instruction and informal learning opportunities (Cheng, 1991; Fradd, 1995)
- gathering information regarding continued language development in the native language and current use of first and second language
- providing a nonbiased assessment of communication function in both the first (native/home language) and second language of the student (Note: IDEA Section 612(a)(6)(B) requires assessment in "the child's native language or mode of communication unless it clearly is not feasible to do so.")
- evaluating both social and academic language proficiency

Hearing Loss and Deafness

In the United States, over 1.2 million children under 18 years of age have either a congenital or an acquired hearing loss (Adams & Marano, 1995). The ultimate academic and social outcomes for these students are dependent upon the coordinated efforts of many individuals, including but not limited to, the student, parents, classroom teachers, the audiologist, and the speech-language pathologist. A teacher of the deaf and hard of hearing, a speech-language pathologist, or an audiologist often serves as the coordinator of services and liaison for the parents and student to the school system. The heterogeneous population of children with hearing loss or deafness encompasses a broad range of functional communication styles and abilities and types of services ranging from students in regular education classes requiring support services to students who are attending a school for the deaf. The relationship that exists between a child's and family's choice of communication systems and his/her ability to develop a language or languages in one or more communication modalities varies among children (ASHA, 1998c).

When a student has a hearing loss, the methods that are chosen for development of language skills are related to such factors as:

- age of onset of the hearing impairment
- type/severity of hearing loss
- availability and use of residual hearing
- presence of additional disabilities
- access to assistive technology (computer-assisted real-time captioning, hearing aids, FM systems) and interpreters/translators (sign, ASL, cued speech)
- level of acceptance, skills, and support by family, educators, and peers
- acoustic environment of the classroom and other spaces used for instruction and extracurricular activities

Numerous reports and studies document the effects of hearing loss on speech, language, social-emotional, and academic development (Baker-Hawkins & Easterbrooks, 1994, Kretschmer & Kretschmer, 1978, Maxon & Brackett, 1987, Quigley & Kretschmer, 1982). Even students with mild, fluctuating, or unilateral hearing loss often exhibit significant academic delays and grade failure (Bess, et al., 1998, Connecticut Advisory School Health Council, 1988; Davis, Elfenbein, Schum, & Bentler, 1986; Gallaudet University Center for Assessment and Demographic Study, 1998, Joint Committee on Infant Hearing, 1994, Oyler, Oyler, & Matkin, 1988).

The Agency for Health Care Policy and Research reports that the most common etiology of temporary and fluctuating hearing loss in children from birth to 3 years of age is otitis media, which can be acute or chronic and may occur with or without effusion (U. S. Department of Health and Human Services, 1994). Not all children who experience otitis media have significant hearing loss or develop subsequent communication and learning problems. However, the prevalence of otitis media (especially chronic otitis media) during what is known to be a significant period in the acquisition of communication skills places children exhibiting this illness at risk for delay or disorder of speech and oral language that may adversely affect educational performance (Friel-Patti, 1990; Roberts & Medley, 1995; Roberts, 1997).

In cooperation with audiologists who serve children in educational settings, the responsibilities of the school speech-language pathologist in assessing the communication needs of children with hearing loss may include:

- collaborating with audiologists and promoting the early detection of children with hearing loss
- conducting hearing screenings for identification of children who can participate in conditioned play or traditional audiometry and referral of individuals with possible ear disorder or hearing loss to audiologists for follow-up audiologic assessment (ASHA, 1998b)
- collaborating with health professionals and audiologists to integrate case history and audiologic information into speech-language assessments
- identifying the communication demands of the various settings in which the child functions (Creaghead, 1992; Palmer, 1997)
- daily trouble shooting and hearing aid and assistive listening device maintenance in the educational setting
- collaborating with audiologists regarding language assessment of students with suspected central auditory processing disorders
- monitoring speech and language development and related educational performance of students with known histories of chronic otitis media and students with unilateral hearing loss
- collaborating with other professionals to evaluate language performance levels and identify communication disorders, if present
- providing aural rehabilitation and sign language development (if competent to do so)

(Connecticut State Department of Education, 1993 and English, 1997)

Neurological, Orthopedic, and Other Health Factors

The neurophysiological systems underlying speech and language development are particularly vulnerable to organic insults that may produce paralysis, weakness, or discoordination. Students with congenital or acquired neurological, orthopedic, or certain health impairments (e.g., TBI) frequently exhibit communication impairments in one or more of the areas of language, articulation/phonology, fluency, voice, resonance, oral motor function, swallowing, or cognitive communication. These deficits may range from mild to severe, with variations in severity over time. The age of onset of the neurological or other physical impairment, as well as their locus and nature, will affect the type of communication impairment that the student exhibits. Although the primary basis of these disorders may be structural, environmental influences on communication development can also be significant—the result of limitations on environmental interaction. The multidimensional nature of these impairments requires the development of comprehensive interdisciplinary programs for evaluation and service (Connecticut State Department of Education, 1993).

The responsibilities of the school speech-language pathologist in evaluating the communication needs of students with neurological, orthopedic, other health impairments, or multiple impairments include:

- promoting early identification of children whose communication development and behavior may suggest the presence of neurologic, orthopedic, other health, or multiple impairments
- collaborating with other professionals to integrate medical history into speech-language assessment
- collaborating with other professionals in the assessment of prespeech skills in the areas of motor development, respiration and feeding, and in assessing the effect of the impairment on communication development and interactions
- assessing the communicative requirements of home, school, and vocational settings
- assessing the need for assistive technology to promote communication development and interaction

(Connecticut State Department of Education, 1993)

Social-Emotional Factors

Communication is an important tool in creating a secure and safe school environment that fosters learning for all students. Speech, language, and listening skills provide the communication foundation for the development and enhancement of confidence and self-esteem in learners. Giddon (1991) emphasizes the need for expanding the role of the school-based speech-language pathologist in mental health issues and behavioral management as part of the team, specifically to assist with communication issues and insights.

Responsibilities when assessing a student with dysfunctional social-emotional communication include:

- participating as a member of a team that assesses students at risk for communication-related educational problems
- collaborating with other professionals and families in an effort to differentiate difficult behaviors that may be due to psychosocial disorders from those related to communication impairments (e.g., misunderstanding orally presented information and using aggression in the absence of appropriate communication)
- assisting educators in identifying behavior patterns that may be related to language dysfunction as well as identifying behavior that negatively affects communication (e.g., selective mutism)
- assisting in the assessment of the communication demands and interactions within various environments to determine those factors that may contribute to breakdowns in learning or interpersonal relations

(Connecticut State Department of Education, 1993)

Eligibility Determination

Comprehensive assessment (data collection) and evaluation (interpretation of that data) enable the speech-language pathologist to identify students with significant communication disorders that are educationally relevant. As part of the eligibility determination for special education and related services, the speech-language pathologist, who has identified the student's speech-language needs, and the team address the relationship between the student's speech and language disabilities and any adverse effect on the ability to learn the general curriculum, including academic, social-emotional, or vocational areas. The team relies on the evaluation results to determine both a student's *need* for service and the student's *eligibility* for special education and related services on the basis of federal legislative mandates, state regulations and guidelines, and local policies and procedures.

The definition of speech or language impairment at the federal level appears in IDEA: "a communication disorder, such as stuttering, impaired articulation, a language impairment or a voice impairment that adversely affects a child's educational performance" [Section 300.7 (b)(11)]. State codes may establish eligibility criteria for each area of speech and language, and frequently for specific age groups (e.g., infants, preschoolers), as well as considerations for culturally/linguistically different or economically disadvantaged students.

School-based speech-language pathologists are responsible for obtaining and following their state eligibility criteria. States may use different indicators for the classification of mild, moderate, severe, or profound. The differing state criteria may result in variations in eligibility decisions, recommended amount of service, and service delivery options. Local procedures may further define severity levels and eligibility criteria.

For general eligibility and dismissal considerations, school-based speech-language pathologists may also refer to the ASHA technical reports, including *Issues in Determining Eligibility for Language Intervention* (1989c) and *Admission/Discharge Criteria in Speech-Language Pathology* (1994a).

IEP/IFSP Development

An individualized education program (IEP) is developed for students (age 3 or older) who qualify for speech and/or language services. The IDEA Amendments of 1997 added new requirements for the composition of the ***IEP team***, detailed several special ***factors*** for the development of the IEP, and expanded specific required ***components*** [Section 614].

The IEP document is developed by the total IEP team, including the speech-language pathologist as appropriate. The ***IEP team*** includes:

- "the parents of a child with a disability
- "at least one regular education teacher of such child (if the child is, or may be, participating in the regular education environment)
- "at least one special education teacher or, where appropriate, at least one special education provider of such child
- "a representative of the local educational agency who—
  - "is qualified to provide, or supervise the provision of, specially designed instruction to meet the unique needs of children with disabilities
  - "is knowledgeable about the general curriculum
  - "is knowledgeable about the availability of resources of the local educational agency
- "an individual who can interpret the instructional implications of evaluation results. . .
- "other individuals. . . who have knowledge or special expertise regarding the child, including related services personnel as appropriate
- "whenever appropriate, the child with a disability"

[Section 614(d)(1)(B) (i-vii)]

Special *factors* in developing the IEP content include:

- "in the case of a child whose behavior impedes his or her learning or that of others, consider, when appropriate, strategies including positive behavioral interventions and supports to address that behavior
- "in the case of a child with limited English proficiency, consider the language needs of the child as such needs relate to the child's IEP
- "in the case of a child who is blind or visually impaired, provide for instruction in Braille and the use of Braille unless the IEP team determines—after an evaluation of the child's reading and writing skills, needs, and appropriate reading and writing media (including an evaluation of the child's future needs for instruction in Braille)—that the use of Braille is not appropriate for the child
- "consider the communication needs of the child; and in the case of a child who is deaf or hard of hearing, consider the child's language and communication needs, opportunities for direct communications with peers and professional personnel in the child's language and communication mode, academic level, and full range of needs, including opportunities for direct instruction in the child's language and communication mode
- "consider whether the child requires assistive technology devices and services"

[Section 614(d)(3)(B)(i-v)]

The IEP includes the ***components*** listed in Table 4.

Table 4. Required components of IEP.

Strengths	The strengths of the child and the concerns of the parents for enhancing the education of their child
Evaluation results	The results of the initial evaluation or the most recent evaluation
Present level of educational performance	The effect of the student's disability on the involvement and progress in the general education curriculum (or participation in appropriate preschool activities)
Annual goals and short-term objectives	Measurable goals, benchmarks, or objectives related to meeting general education curriculum or other educational needs that result from the disability
Amount of special education or related services	Projected beginning date, frequency, and duration of service
Supplementary aids and services	Program modifications or support services necessary for the student to advance toward attaining annual goals, be involved and progress in the general education curriculum, participate in nonacademic activities, and be educated and participate in activities with other students with and without disabilities
Participation with students without disabilities	Extent of participation with students without disabilities in the general education class and in extracurricular activities
Test modifications	Modifications in the administration of state- or district-wide assessments of student achievement that are needed in order for the student to participate in the assessment (If exempt, the reason the test is not appropriate must be stated.)
Transition service	At age 14, transition services that focus on the student's courses of study At age 16, transition services that specify interagency responsibilities or needed community links
Notification of transfer of rights	Documentation that the student has been informed of the rights that will transfer to the student upon reaching the age of majority under state law (must notify at least one year before the student reaches that age of majority)
Evaluation procedures and method of measurement	Measures of the student's progress (e.g., criterion-referenced test, standardized test, student product, teacher observation, or peer evaluation) and how often the evaluation will take place (e.g., daily, weekly, monthly, each grading period/semester, or annually). Progress must be reported as often as progress is reported for general education students.
IEP team members	Signatures of all members of the IEP team that developed the IEP

Source: Section 614d(3)(A)(i-ii), 614d (1)(A)(i-viii)

The IEP is reviewed at least annually (or more often to reflect program changes). The IEP must be in effect at the beginning of each school year.

For each IDEA-eligible infant and toddler (under 3 years of age), an Individualized Family Service Plan (IFSP) is required. The IFSP must be developed at an IFSP meeting held within mandated time lines. Speech-language pathologists are responsible for being familiar with the required procedures for the development and review of the IFSP [Section 636]. Speech-language pathologists who work with infants and toddlers are involved in ensuring that the child's communication needs are addressed upon transition to preschool services under IDEA.

Caseload Management

The role of the school-based speech-language pathologist is to assist the team in selecting, planning, and coordinating appropriate service delivery and various scheduling options throughout the duration of services—not just for initial placement decisions.

If the speech-language pathologist serves as the case manager for any student identified as needing special education and or related services, the responsibilities of the speech-language pathologist may include:

- scheduling and coordinating both school-based and community assessments
- assuming a leadership role in developing the IEP/IFSP
- assisting families in identifying available service providers and advocacy organizations within the community
- coordinating, monitoring, and ensuring timely delivery of special education and/or related services
- scheduling and coordinating the re-evaluation process
- facilitating the development of transition plans
- coordinating services or providing consultation for students in charter schools and private schools

(ASHA, 1989b)

Service Delivery Options

Recommendations regarding the nature (direct or indirect), type (individual or group), and location of service delivery (speech-language resource room, classroom, home, or community) are based on the need to provide a free, appropriate public education for each student in the least-restrictive environment and consistent with the student's individual needs as documented on the IEP. Considerations include:

- strengths, needs, and emerging abilities
- need for peer modeling
- communication needs as they relate to the general education curriculum
- need for intensive intervention
- effort, attitude, motivation, and social skills
- severity of the disorder(s)
- nature of the disorder(s)
- age and developmental level of the student

The *18th Annual Report to Congress on the Implementation of the Individuals with Disabilities Education Act* stressed the importance of providing a full continuum of services for students with disabilities. The report specifies that there is no single special education setting that benefits all students. A range of options, tailored to meet the individual needs of all students, continues to be the most effective approach (U. S. Department of Education, 1996).

The Department of Education recommendation is consistent with ASHA's position statement on inclusive practices which states that "an *array* of speech, language, and hearing services should be available in educational settings to support children and youths with communication disorders." (1996b, p. 35). The *inclusive practices* philosophy emphasizes serving students "in the least restrictive environment that meets their needs optimally" (p. 35). See Table 5 for an explanation of service delivery options. During the course of intervention, a student might participate in several service delivery models before dismissal.

Table 5. Service delivery options.

Service delivery is a dynamic concept and changes as the needs of the students change.

No one service delivery model is to be used exclusively during intervention.

For all service delivery models, it is essential that time be made available in the weekly schedule for collaboration/consultation with parents, general educators, special educators and other service providers.

MONITOR: The speech-language pathologist sees the student for a specified amount of time per grading period to monitor or "check" on the student's speech and language skills. Often this model immediately precedes dismissal.

COLLABORATIVE CONSULTATION: The speech-language pathologist, regular and/or special education teacher(s), and parents/families work together to facilitate a student's communication and learning in educational environments. This is an indirect model in which the speech- language pathologist does not provide direct service to the student.

CLASSROOM BASED: This model is also known as integrated services, curriculum-based, transdisciplinary, interdisciplinary, or inclusive programming. There is an emphasis on the speech-language pathologist providing direct services to students within the classroom and other natural environments. Team teaching by the speech-language pathologist and the regular and/or special education teacher(s) is frequent with this model.

PULLOUT: Services are provided to students individually and/or in small groups within the speech-language resource room setting. Some speech-language pathologists may prefer to provide individual or small group services within the physical space of the classroom.

SELF-CONTAINED PROGRAM: The speech-language pathologist is the classroom teacher responsible for providing both academic/curriculum instruction and speech-language remediation.

COMMUNITY BASED: Communication services are provided to students within the home or community setting. Goals and objectives focus primarily on functional communication skills.

COMBINATION: The speech-language pathologist provides two or more service delivery options (e.g., provides individual or small group treatment on a pull-out basis twice a week to develop skills or preteach concepts and also works with the student within the classroom).

Sources: ASHA, 1993b, 1996b

Scheduling Students for Intervention

An ongoing caseload management responsibility of the school-based speech-language pathologist is to determine the most effective use of time and services. Intensity and duration of service for a student are based on such factors as the:

- nature and severity of speech-language disorders
- impact on educational performance
- student's academic program
- student's involvement in other special education programs
- additional support systems available
- levels of service to be given
- provision for consultative service

Additional considerations that affect the speech-language pathologist's schedule include:

- time for screening, testing, test interpretation, report writing, team meetings, case management, and conferences
- collaboration/consultation and planning time
- master schedule (e.g., lunch, music, school-wide activities)
- special schedule considerations (e.g., half-day kindergarten, block schedules)
- number of schools served
- travel between schools
- availability of appropriate facility/location for services (U. S. Congress, 1990a)
- programming of AAC devices and planning for and training parents and educators in the use of assistive technology
- continuing education

Caseload Size

The *Guidelines for Caseload Size* and *Speech-Language Service Delivery in the Schools* (ASHA, 1993b) delineate many considerations to be observed in determining caseload size, including roles and responsibilities of the speech-language pathologist, age and severity of students, and service delivery models. The following statement from that ASHA document provided recommendations for caseload size in 1993, however, changes in student population and IDEA requirements should also be considered in determining appropriate caseload size today.

> "Caseload size must reflect a balance between how many hours are available in the school day for services to students, and how many hours are needed to complete paperwork, staffing, and other required activities. The recommended maximum caseload for appropriate services is 40 students, regardless of the type or number of service delivery models selected. Special populations may dictate fewer students on the caseload. A recommended maximum caseload composed entirely of preschoolers is 25. Other populations that may require additional time, and therefore fewer students on the caseload, include students who are technologically dependent, medically fragile, multilingual or limited-English proficient. Some states limit the number of students in self-contained classrooms. Eight students without a support person, or 12 students with a support person, are the recommendations for this type of setting." (ASHA, 1993b).

Intervention for Students with Communication Disorders

Speech-language pathology services may be provided for students with speech, language, or communication disorders as defined by the evaluation and eligibility criteria established within federal mandates, state guidelines, and local policies and procedures for special education and related services.

Students receive intervention when their ability to communicate effectively is impaired (or their diagnosis indicates risk for impairment) *and* there is reason to believe that intervention will reduce the degree of impairment, disability, or handicap and lead to improved communication behaviors (ASHA, 1997e). Established IEP goals and objectives are implemented for students who qualify for services under IDEA through direct and/or indirect services to facilitate the achievement of the stated objective criteria. Intervention, aimed at achieving functional communication outcomes, is provided through various methods and techniques. Just as evaluation decisions are based on a thorough understanding of speech and language development and the processes of communication, so too are intervention decisions.

It is beyond the scope of this document to describe specific techniques for intervention. Entire university courses and texts, professional institutes and seminars, professional literature and articles, ASHA Special Interest Divisions, and Web sites are devoted to intervention techniques for specific deficits and disorders within each speech and language area. Commercially published materials for remediation of speech, language, and communication disorders, when appropriately selected to match the students needs, are additional useful tools to assist students in meeting their goals and objectives. It is the responsibility of the speech-language pathologist to keep current on intervention methods reflecting best-practices in speech-language pathology.

General Intervention Methods

Speech-language pathologists benefit from the literature produced by the effective schools research. Christenson and Ysseldyke (1989) identified 10 factors within the four components of effective teaching: planning, managing, delivering, and evaluating instruction. Algozzine and Ysseldyke (1997) expanded that work by delineating numerous "effective" strategies and specific tactics (activities) that teachers could implement. These strategies are used for teacher training, as well as by Intervention Assistance Teams.

School-based speech-language pathologists rely on principles of effective intervention when working with students who have disorders within all areas encompassed by ASHA's *Scope of Practice in Speech-Language Pathology* (1996c). Table 6 outlines responsibilities for intervention which include planning, managing, delivering, and evaluating intervention. These general methods facilitate effective intervention for students.

Table 6. Methods for effective intervention.

Responsibilities	Methods
Planning intervention	Determine priority areas for intervention Determine content to meet goals and objectives Select appropriate materials Determine intervention methods based on student learning styles
Managing intervention	Establish classroom management system Establish positive environment Use time productively Communicate realistic expectations Coordinate curricula and goals with other educational staff, parents/families Motivate students
Delivering intervention	Present instruction Promote problem-solving and thinking skills Provide relevant practice of skills taught Provide opportunity for communication in the natural environment Keep students actively involved Provide feedback Prompt/cue as appropriate during guided learning
Evaluating intervention	Monitor engaged time Monitor student understanding Make judgments about student performance Maintain records of student progress Inform students, parents, and teachers of progress Use treatment outcomes data to make decisions Determine effect on classroom performance Modify instruction

Based on the work of Algozzine, B., & Ysseldyke, J., 1997. *Strategies and Tactics for Effective Teaching*. Adapted with permission.

During intervention, the speech-language pathologist communicates with parents, families, educators, and other community professionals to (a) reinforce IEP/IFSP goals at home and in the classroom, (b) facilitate generalization of communication abilities, and (c) monitor the student's progress. Speech-language pathologists may also provide information concerning the characteristics of the classroom environment conducive to communication development. Classroom or individual accommodations or modifications may be suggested related to seating and positioning; time demands; pragmatic/social language; organizational or note-taking skills; assistive technology devices, systems, or services; and materials that may assist the student in communicating more effectively in the school environment.

Scope of Intervention

Speech-language pathology is a dynamic and continuously developing practice area. The scope of practice should not be regarded as all-inclusive; that is, it does not necessarily exclude new or emerging areas.

ASHA's *Scope of Practice in Speech-Language Pathology* includes treatment and intervention (i.e., prevention, restoration, amelioration, compensation) and follow-up services for disorders of:

- "language (involving the parameters of phonology, morphology, syntax, semantics, and pragmatics; and including disorders of receptive and expressive communication in oral, written, graphic, and manual modalities)
- "cognitive aspects of communication (including communication disability and other functional disabilities associated with cognitive impairment)
- "social aspects of communication (including challenging behavior, ineffective social skills, lack of communication opportunities)
- "speech: articulation, fluency, voice (including respiration, phonation, and resonance)
- "oral, pharyngeal, cervical esophageal, and related functions (e.g., dysphagia, including disorders of swallowing and oral function for feeding; orofacial myofunctional disorders)" (ASHA, 1996c, p. 18)[11]

Although the components of the Scope of Practice are listed separately within this document for ease of discussion, each component of communication is interconnected with and greatly influences the other components. If there is a deficit in any one area of language or speech, it may directly influence other areas.

The responsibilities of the speech-language pathologist in intervention for all communication disorders within the Scope of Practice of Speech-Language Pathology include:

- reviewing all assessment/evaluation information
- comparing assessment data with knowledge of normal language, speech, and communication development
- considering other factors that may have depressed communication ability, and addressing those through intervention, recommending accommodations or modifications to the environment, or referring to other health professionals
- selecting materials appropriate to age and developmental level
- applying effective teaching principles (see Table 6, p. 40)
- collaborating with parents and education personnel
- observing student responses during intervention to determine progress

The following are descriptions of the areas included in the scope of practice of school-based speech-language pathologists.

Communication. Communication is the process of exchanging ideas and information through verbal and nonverbal means. It is a complete process for both speaker and listener.

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[11] The list of disorders has been reordered to follow the text of this document.

According to ASHA, "A communication disorder is an impairment in the ability to receive, send, process, and comprehend concepts or verbal, nonverbal, and graphic symbol systems. A communication disorder may be evident in the processes of hearing, language, and/or speech. A communication disorder may range in severity from mild to profound. It may be a developmental or acquired disorder. Individuals may demonstrate one or any combination of speech/language disorders. A communication disorder may result in a primary disability or it may be secondary to other disabilities" (1993a, p. 40). A deficit in any of the following components of language or speech may interfere with communication competence.

***Language*.** Language is a complex and dynamic system of conventional symbols that is used in various modes for thought and communication.

"Contemporary views of human language hold that:

- Language evolves within specific historical, social, and cultural contexts.
- Language, as rule-governed behavior, is described by at least five parameters: phonology, morphology, syntax, semantics, and pragmatics.
- Language learning and use are determined by the interaction of biological, cognitive, psychosocial, and environmental factors.
- Effective use of language for communication requires a broad understanding of human interaction including such associated factors as nonverbal cues, motivation, and sociocultural roles."

(ASHA, 1987, p. 54)

Table 7 lists a few illustrative examples of communication behaviors representative of each language domain and system. The table is not intended to be all-inclusive of the myriad communicative behaviors that reflect language knowledge and skills.

Table 7. Oral and written receptive and expressive language factors.

	LISTENING Receptive	SPEAKING Expressive	READING Receptive	WRITING Expressive
FORM	Applies phonological, morphological, and syntactic rules for comprehension of oral language	Uses words and sentences correctly in discourse according to phonological, morphological, and syntactic rules	Applies graphophonemic, morphological, and syntactic rules for comprehension of text	Uses words and sentences correctly in writing according to spelling, morphological, and syntactic rules
CONTENT	Comprehends the meaning of words and spoken language	Selects words and uses oral language to convey meaning Formulates thoughts into oral language Uses precise and descriptive vocabulary Uses literal and figurative language	Comprehends the meaning of words and text	Selects words and uses written language to convey meaning Formulates thoughts into written language Uses precise and descriptive vocabulary Uses literal and figurative language
FUNCTION	Follows directions Understands social meanings	Uses appropriate language for the social context Takes turns in listener/speaker role	Understands mood, tone, style, and context of text	Follows rules of discourse Uses various styles and genres of writing
COGNITIVE COMMUNICATION COMPONENTS	Attention, long- and short-term memory, problem solving, and related components			

"A language disorder is impaired comprehension and/or use of spoken, written, and/or other symbol systems. The disorder may involve (1) the form of language (phonology, morphology, syntax), (2) the content of language (semantics), and/or (3) the function of language in communication (pragmatics) in any combination" (ASHA, 1993a, p. 40). Intervention is conducted to achieve improved, altered, augmented, or compensated language behaviors for listening, speaking, reading, and writing. (ASHA, 1996c).

Cognitive-Communication. Speech-language pathologists provide intervention for both congenital and acquired cognitively based communicative impairments. The speech-language pathologist concerned with the management of students with cognitive communication disorders assumes responsibility for thorough and flexible exploration of relations between cognitive deficits and their communication consequences. (ASHA, 1987)

Impairments of cognitive processes may contribute to deficits in the syntactic, semantic, phonologic, and/or pragmatic aspects of language. Speech-language pathologists engage in interventions for cognitive communication impairments such as:

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- determining the appropriateness of intervention on the basis of potential for functional improvement in a reasonable and generally predictable period of time
- selecting or designing appropriate tasks, stimuli, and methods—including such recent advances as the use of computers and augmentative devices
- implementing individual and group programs specifically designed to treat cognitive-communicative deficits
- training and counseling students, family members, educators, and other professionals in adaptive strategies for managing cognitive-communicative disorders
- recognizing the effects of pharmacologic intervention and neurodiagnostic procedures on each student's behavior and reporting behavioral changes to appropriate physicians
- integrating behavior modification techniques as appropriate for the management of associated problems, such as self-abusive and combative behaviors and agitation
- recommending prosthetic and augmentative cognitive-communicative devices (ASHA, 1987)

Language and academic success. In addition to their traditional roles, school speech-language pathologists have a growing impact on students' success from preschool through adolescence in such areas as enhancing **literacy development** and developing **social-emotional communication** skills. Speech-language pathologists working in school settings have increasingly assumed the role of collaborating with classroom teachers to enhance academic success for all students (ASHA, 1993d; Canady & Krantz, 1996).

Literacy development. Speech-language pathologists in the schools have become increasingly aware of the need for expanding their contributions in the areas of reading and writing skills. Butler (1996) emphasizes the importance of recognizing the complex interplay between spoken and written language and the need to go beyond listening and speaking to reading and writing. Children's reading and writing skills have been found to reflect their oral language competence (Achilles, Yates, & Freese, 1991; Adams, 1990; Canady & Krantz, 1996; Horowitz & Samuels, 1987; Olson, Torrance, & Hildyard, 1985), thereby linking oral language disorders with specific reading disabilities. Research demonstrates that language is continuous across both oral and written modalities. One of the obstacles "to skilled reading is a failure to transfer the comprehension skills of spoken language to reading and to acquire new strategies that may be specifically needed for reading" (National Research Council, 1998, p. 4). Silliman and Wilkinson (1994a) discuss this integration of communicative processes as the pathway to literacy (p. 27). Reading is a complex behavior requiring high-level linguistic (semantic and syntactic) abilities as well as decoding skills.

Research has also shown that explicit awareness of the speech sound system (phonological awareness) is related to early reading development (Blachman, 1994; Catts, 1993; Swank & Catts, 1994; Torgeson & Wagner, 1994, Wagner and Torgeson, 1987). Speech-language pathologists' knowledge of specific intervention techniques for phonological deficits enables them to plan and support early intervention programs focusing on training of phonological awareness in preschool and primary grades (Catts, 1991; Gillam & van Kleeck, 1996). Training in oral and written language assessment and remediation allows the speech-language pathologist to make valuable contributions in the intervention of the full range of reading and writing disabilities (Catts & Kamhi, 1986, 1999; Kamhi & Catts, 1991).

Thus, the speech-language pathologist's goal is to establish an environment that allows for maximum practice and development of all language skills, whether it be through reading, writing, listening, or speaking.

It is the speech-language pathologist's responsibility regarding literacy to:

- collaborate with other school personnel to develop emergent literacy and language arts programs that incorporate activities appropriate to the developmental communication levels of children
- participate in the selection or modification of language arts and instructional strategies curricula and materials for use in integrating instruction in reading, writing, listening, and speaking
- provide information and training regarding the linguistic bases of reading and writing and the development of environments and activities that foster the development of literacy skills
- provide information and support for parents of at-risk children regarding the importance of literacy activities within the home environment
- provide intervention by teaching phonemic, syntactic, morphemic, and semantic aspects of language in both oral and written modalities
- assist in the development of students' oral and written discourse skills
- collaborate with classroom teachers and reading professionals to enhance academic success for children who experience difficulty with reading, writing, listening, and speaking

Social-emotional communication skills. One of the major identified problems facing American schools is disruptive, violent, or unacceptable behavior that impedes learning not only for the violating student but for other students in the same classroom (ASHA, 1994i; U.S. Congress, 1993). These students create a threatening environment for themselves, classmates, and the school staff. Language skills are an important ingredient in establishing social relationships. Typically developing children employ their language skills to share information, express feelings, direct behavior, and negotiate misunderstandings as they interact with others. Classroom behavior management systems encouraging students to communicate with their teachers and peers are important. Students with speech and language impairments, however, have been shown to exhibit poorer social skills and fewer peer relationships than their normally developing peers (Fujiki, Brinton, & Todd, 1997). It is also well documented that students with a range of disabilities involving language deficits experience significant social difficulties (Antia & Kreimeyer, 1992; Aram, Ekelman, & Nation, 1984; Bryan, 1996; Guralnick, 1992). The speech-language pathologist, as a team professional in the school setting, can contribute to solutions that may result in positive change.

The responsibilities specific to developing social-emotional communication skills are to:

- provide information to the instructional staff regarding the role of pragmatics and dynamics of communication when dealing with social-emotional problems in the school
- assist in the training of educational staff on the effective use of verbal and nonverbal communication in conflict resolution and discipline

- collaborate with educational staff and parents to determine the communicative intent of the child's obvious and subtle behaviors, and to facilitate the use of socially appropriate communication
- collaborate with the school staff, as a member of a school peer mediation team, to enhance students' self esteem by increasing their skills as effective communicators
- demonstrate lessons, team teach, and model techniques to enhance pragmatic communication skills in the areas of problem solving, social communication, and coping skills
- provide consultative services that address development of vocabulary to enhance emotional expression and control.

Central auditory processing disorders. The speech-language pathologist is the professional who may be most involved in the management of children with central auditory processing disorders (CAPD), particularly if recommendations involve direct therapeutic techniques that can best be handled in an individual therapy situation or if the student exhibits a language-based CAPD that requires more traditional language intervention. The speech-language pathologist monitors the student's speech and language capabilities during the CAPD intervention process.

Components of a comprehensive CAPD intervention program include:

- training and education of key individuals
- resources for implementing management suggestions
- methods of data collection and research to document program efficacy

Intervention leads to improvement in listening, spoken language processing, and the overall communication process. Intervention for students with CAPD includes:

- auditory training or stimulation
- communication and/or educational strategies
- metalinguistic and metacognitive skills and strategies
- use of assistive listening devices as recommended
- acoustic enhancement and environmental modification of the listening environment as recommended
- collaboration with professionals and families to increase the likelihood of successfully implementing intervention strategies
- family counseling regarding their role in the management process (Bellis, 1997)

Speech. Speech disorders may be impairments of articulation/phonology, fluency, or voice/resonance. Impairment of any of these categories may have a negative effect on general communication and general educational progress if the disorder is distracting enough to interfere with the speaker's message. Assessment that identifies specific areas of need assists intervention decisions.

Articulation/phonology. Accurate production of speech sounds relies on the interplay of phonemic, phonological, and oral-motor systems. See Table 8 for representative aspects of each area.

Table 8. Articulation/phonology components.

Phonemic	Phonological	Oral-Motor
Speech sounds. Categorized by vowels and by consonant manner, place, and voicing.	The rules for the sound system of the language, including the set of phonemes with allowable combination and pattern modifications.	Oral motor range, strength, and mobility. Planning, sequencing, and co-articulation of speech movements.

An articulation or phonological disorder is "the atypical production of speech sounds characterized by substitutions, omissions, additions or distortions that may interfere with intelligibility" (ASHA, 1993a, p. 40). Children with phonological disorders exhibit error patterns in the application of phonological rules for speech. Intervention is conducted to achieve improved, altered, augmented or compensated speech (ASHA, 1997e).

Orofacial-myofunctional treatment is conducted to improve or correct the student's orofacial myofunctional patterns and related speech patterns. Orofacial myofunctional intervention may include alteration of lingual and labial resting postures, muscle retraining exercises, and modification of processing and swallowing solids, liquids, or saliva and may be conducted concurrently with speech-language intervention (ASHA 1991d, p 7; 1997e).

Fluency. There are numerous theories concerning the development of fluent speech. Ramig and Shames (1998) provide a historical review and summarize various theories about the causation of stuttering. Intervention approaches for reducing disfluency address one or all of the affective, behavioral, and cognitive components represented in Table 9.

Table 9. Fluency factors.

Affective	Behavioral	Cognitive
Feelings about speaking	Respiration	Language/linguistic competencies
Self-esteem	Articulation	Accuracy of perceptions
Feelings in response to environmental and situational influences	Phonation	Attitudes about speaking
Feeling of fluency control	Rate of speaking	Attitudes regarding fluency
	Concomitant factors	

"A fluency disorder is an interruption in the flow of speaking characterized by atypical rate, rhythm, and repetitions in sounds, syllables, words, and phrases. This may be accompanied by excessive tension, struggle behavior, and secondary mannerisms" (ASHA, 1993a, p. 40). Stuttering may be viewed as a syndrome characterized by abnormal disfluencies accompanied by observable affective, behavioral, and cognitive patterns (Cooper & Cooper, 1998).

ASHA's *Preferred Practice Patterns for the Profession of Speech-Language Pathology* (1997e) contains information regarding the roles of the school-based speech-language pathologist in the assessment of students who stutter. ASHA's *Guidelines for Practice in Stuttering Treatment* (1995b) provide additional information concerning the assessment and treatment of stuttering.

Responsibilities for students with fluency disorders include planning and implementing intervention to:

- reduce the frequency of stuttering
- reduce severity, duration, and abnormality of stuttering behaviors
- reduce defensive behaviors
- remove or reduce factors which create, exacerbate, or maintain stuttering behaviors
- reduce emotional reactions to specific stimuli when they increase stuttering behavior
- transfer and maintain these and other fluency producing processes

(ASHA, 1995b)

Voice and resonance. Physical, functional, and emotional factors are integrated to produce vocal competence (see Table 10). An adequate voice is one that is appropriate for the student's age and sex and does not create vocal abuse.

Table 10. Voice/resonance factors.

Physical	Functional	Emotional
Respiration: lungs, diaphragm	Loudness/intensity, sustained phonation	Confidence
Phonation: larynx, vocal folds	Pitch, onset of phonation	Self-esteem
Resonance: velopharyngeal, oral, and nasal resonance structures	Resonance and airflow	Stress

"A voice disorder is characterized by the abnormal production and/or absence of vocal quality, pitch, loudness, resonance, or duration, which is inappropriate for an individual's age and/or sex" (ASHA, 1993a, p. 40). Intervention for students with voice disorders is conducted to achieve improved voice production, coordination of respiration and laryngeal valving to allow for functional oral communication (Andrews, 1991; ASHA, 1997e).

All students with voice disorders must be examined by a physician, preferably in a specialty appropriate to the presenting complaint. The examination may occur before or after the voice evaluation by the speech-language pathologist (ASHA, 1997e).

Students affected by resonance and airflow deficits are treated to achieve functional communication. Structural deficits related to these deficits include congenital palatal insufficiency and/or velopharyngeal insufficiency or incompetence.[12] Other resonance and airflow deficits include neuromuscular disorders, faulty learning, or sound specific velopharyngeal incompetence.

The responsibilities related to intervention for voice and resonance disorders include:

- giving information and guidance to students, teachers and other professionals, and families about the nature of voice disorders, alaryngeal speech, and/or laryngeal disorders affecting respiration
- providing appropriate voice care and conservation guidelines, including strategies that promote healthy laryngeal tissues and voice production and reduce laryngeal trauma or strain
- discussing goals, procedures, respective responsibilities and the likely outcome of intervention
- instructing in the proper use of respiratory, phonatory, and resonatory processes to achieve improved voice production

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[12] *Velopharyngeal* describes structures or disorders between the soft palate and the back wall of the nasopharynx. When the structures in this area close, it is known as velopharyngeal closure. This closure takes place during speech and swallowing so that the oropharynx is separated from the nasopharynx by the raising of the soft palate and the moving inward of the walls of the pharynx. A failure of this closure is known as velopharyngeal incompetence. If the soft palate or vellum fails to reach the back wall of the pharynx because of damage or because it is too short to reach the wall, it is known as velopharyngeal insufficiency. (Morris, 1993)

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Swallowing. Safe swallowing and eating are essential activities of daily living and are needed to ensure effective communication. As noted in Table 11, a combination of physical, functional, and health factors are considered when determining if intervention is appropriate.

Table 11. Swallowing factors.

Physical	Functional	Health
Oral, pharyngeal, esophageal function	Safe and efficient eating	Pulmonary complications
Respiratory function	Developmental skills for eating	Nutritional implications
Gastrointestinal consideration	Pleasure of eating, social interaction	Modified diet

"Swallowing function treatment is conducted to improve the student's oral, pharyngeal, and laryngeal neuromotor function and control and coordination of respiratory function with swallowing activities" (ASHA, 1997e, p. 63). The school-based speech-language pathologist may facilitate the student's ability to efficiently chew and swallow more safely and more efficiently. School-based speech-language pathologists may integrate swallowing function intervention with communication function intervention (ASHA, 1990b).

Intervention for swallowing disorders may include:

- providing information and guidance to students, families, and caretakers about the nature of swallowing and swallowing disorders
- consulting and collaborating with medical providers throughout planning and intervention
- training caregivers and educational staff on safe eating and swallowing techniques
- instructing families, caregivers, and educators on the social-emotional relationship between feeding/swallowing and educational success.

Intervention for Students With Communication Variations

Cultural and/or Linguistic Diversity

"Our nation's need for multicultural infusion is gaining importance as its population continues to diversify" (Cheng, 1996). America's educators are developing alternative strategies to supplement traditional instructional methods for meeting the needs of culturally and linguistically diverse students (ASHA, 1983; 1985a). ASHA recognizes the role of the speech-language pathologist as a resource or consultant to the classroom teacher. The speech-language pathologist who has a thorough knowledge of the linguistic rules of a student's dialect can assist the classroom teacher in taking the child's dialect into account in instruction (Cole, 1983).

"Communication difference/dialect is a variation of a symbol system used by a group of individuals that reflects and is determined by shared regional, social, or cultural/ethnic factors. A regional, social, or cultural/ethnic variation of a symbol system should not be considered a disorder of speech or language" (ASHA, 1993a, p. 41). Responsibilities relating to students with social dialects include:

- consultation with preschool and elementary teachers and the student's family in efforts to bridge the gap between home and school language for students with social dialect variants
- collaboration with other school personnel to develop a school environment in which cultural and linguistic diversity are respected and addressed within the curriculum
- consultation with school instructional staff to promote an understanding of social dialects as serving communication and social solidarity functions
- consultation with classroom teachers to promote an understanding of specific dialects as rule-governed linguistic systems with distinct phonological and grammatical features as well as semantic and pragmatic variants
- collaboration with the educational staff to assure that instructional approaches, materials, and activities are appropriate for the child's cultural and linguistic differences
- providing inservice to educational staff regarding language difference versus language disorders

Also see the Office of Multicultural Affairs related reading list (ASHA, 1997a).

Limited English Proficiency

Recommendations for classroom and curriculum modifications vary depending on the student's proficiency on the continuum from nonfluent to fluent for both English and the native language. It is important for the speech-language pathologist to understand the bilingual as well as the monolingual language acquisition process. It is also important for the school-based speech-language pathologist to be familiar with current norms for the morphological, semantic, syntactic, pragmatic, and phonological development of children from limited-English proficient backgrounds. Consultation with a bilingual speech-language pathologist and other professionals (e.g., ESL instructors, interpreter/translators, etc.) is recommended (ASHA, 1985a; 1989a; 1998f). See also the Office of Multicultural Affairs related reading list (ASHA, 1998a).

Responsibilities relating to intervention for students with a primary language other than English include:

- assisting the classroom teacher in taking the student's language skills into account for instruction
- assisting the classroom teacher in understanding communication style differences in limited-English-proficient populations
- helping students who are eligible for services develop a command of the structure, meaning, and use of English
- assisting parents with appropriate modeling and use of language stimulation activities
- referring students for additional services or programs, as appropriate

Students Requiring Technology Support

The school-based speech-language pathologist recommends support services to classroom teachers in the form of assistive technology and classroom adaptations that will improve communication opportunities for students and allow them to more fully participate in classroom discourse. "Augmentative and alternative communication systems attempt to compensate and facilitate, temporarily or permanently, for the impairment and disability patterns of individuals with severe expressive and/or language comprehension disorders. Augmentative/alternative communication may be required for individuals demonstrating impairments in gestural, spoken, and/or written modalities" (ASHA, 1993a, p. 41). Augmentative and alternative communication systems, as well as computer technology, may improve school performance. The speech-language pathologist often teams with allied professionals, such as occupational therapists and physical therapists, to evaluate and implement adaptations for specific needs of students with physical limitations.

Responsibilities related to assistive technology intervention and services include:

- providing input on the effect of physical organization of the classroom in fostering communication development and interaction
- monitoring the technology needs of the student given curriculum expectations
- recommending and selecting augmentative or assistive technology devices or services to promote communication and participation in the regular classroom
- training teachers, families, and students on the appropriate use of the technology device or services

(ASHA, 1997e, 1998d).

Counseling

Counseling facilitates recovery from or adjustment to a communication disorder. The purposes of counseling may be to provide information and support, refer to other professionals, and/or help develop problem-solving strategies to enhance the intervention process. Requests for information and support as well as strategies for achieving goals should be determined in collaboration with students and families.

Counseling may be considered an intervention technique; however, it is a particular type of intervention appropriate in dealing with all language, speech, and communication disorders. Counseling may be appropriate for parents, families, and/or students, depending upon the age of the student. The process of counseling improves two-way communication. Improved communication affects the ability to make decisions regarding cause/effect (etiology), appropriate intervention, and transfer and maintenance (carryover) (Johnston & Umberger, 1996). Johnston and Umburger also list three methods of counseling:

- interpersonal communication
- indirect counseling
- direct counseling

Counseling for students and families includes:

- assessment of counseling needs
- assessment of family goals and needs
- provision of information
- strategies to modify behavior or environment relating to speech and language
- development of coping mechanism and systems for emotional support
- development and coordination of self-help and support groups relating to speech and language

It is the responsibility of the speech-language pathologist to:

- develop open and honest communication
- collaborate with students and families to determine and meet counseling/information support needs
- determine when it would be appropriate to provide direct or indirect counseling relating to speech and language issues
- refer students or families with counseling issues to licensed and certified professionals when appropriate

Re-evaluation

Re-evaluation needs are addressed by the IEP team for all students eligible for special education or related service at least once every 3 years to determine if there is a need for re-evaluation regardless of whether the students are served in a direct or an indirect intervention model. A student may be re-evaluated more frequently to ensure that the goals and objectives of the current program and setting meet the needs of the student. This more frequent re-evaluation may be initiated at teacher or parent request [Sections 614(a)(2)(A), 614(a)(4)(A)].

Informed parental consent is required before conducting a re-evaluation, except when the local education agency (LEA) can demonstrate that it has taken reasonable measures to obtain consent and the parent has not responded [Section 614 (c)(3)].

Re-evaluation may include:

- re-evaluations conducted as required by IDEA[13] (This comprehensive evaluation includes assessment results as well as consideration of all pertinent information: classroom-based assessments, observations, and information provided by the parent.)
- annual reviews conducted to evaluate and revise the IEP to ensure that goals and objectives reflect the student needs (Progress is documented, outcomes are reviewed, and goals are affirmed or revised.)
- ongoing/periodic evaluation of student responses observed and documented during intervention (e.g., dynamic assessment and observing improvements with scaffolding[14])

Revisions to the intervention plan and to the IEP are made when necessary.

Re-evaluation leads to:

- continuation or modification of the current special education program or related service
- referral to additional special education programs or appropriate related service agencies
- dismissal

Transition

Speech-language pathologists participate on planning teams to assist students in successful transition. Transition may entail a change: from special education to general education; between such levels as early intervention (infant and toddler), preschool, elementary, and secondary school programs; or from high school to post-secondary destinations including employment, vocational training, military, community college, or 4-year college.

Students who have been in self-contained, specialized classes require encouragement and support during transition to a less-restrictive environment. For transition to be successful, it is important to communicate with parents, teachers, and other professionals in order to integrate speech and/or language goals into the home, classroom, other programs, and the community. Progress and outcomes are documented in each setting.

The school-based speech-language pathologist is a member of the team that supports a student's effective transition. Both "sending" and "receiving" speech-language pathologists are involved in the IEP development process as well as in program planning at the time of transition.

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[13] If the IEP Team determines that no additional data are needed to determine whether the student continues to be a student with a disability, the LEA may notify the parent of that determination and the reasons for it and the right of the parents to an assessment to determine whether the student continues to be a student with a disability. Unless the parent requests such an assessment, a reevaluation is not required [Section 614(c)(4)].

[14] The concepts of dynamic assessment and scaffolding are addressed in Wallach and Butler (1994) by several authors: Nelson; Palincsar et al.; Silliman & Wilkinson; and van Kleeck.

The school-based speech-language pathologist prepares students for the anticipated communication demands of vocational or post-secondary settings. Promoting transition readiness at each level enhances the student's and parent's level of comfort, confidence, and success in the new environment.
(See further [Section 614(d)])

Dismissal

The discussion of dismissal actually begins during the eligibility staffing meeting when prognostic indicators and guidelines for dismissal are discussed with the parent.[15] Although the prognosis may change over time, consideration should be given to:

- potential to benefit from intervention
- medical factors
- psychosocial factors
- attendance
- parent involvement
- teacher involvement
- other disabling conditions
- student motivation
- progress with previous services

(Florida State Department of Education, 1995)

A local education agency shall evaluate a student with a disability before determining the student is no longer a student with a disability [Section 614 (c)(5)]. An IEP review team convenes to review all standardized and nonstandardized assessment information, and a formal meeting is scheduled if dismissal is indicated.

Dismissal occurs when a student no longer needs special education or related services to take advantage of educational opportunities. Reasons for dismissal and the interdisciplinary team's recommendation for dismissal are documented. State regulations and guidelines vary as to when dismissal is appropriate. The Illinois State Board of Education (1993) specifies that students must meet one of three exit criteria:

- The need for specialized services to address the adverse effect(s) on educational performance is no longer present.
- The disability no longer has an adverse effect on the student's educational performance.
- The disability no longer exists.

Numerous states and some districts have developed dismissal standards for each language and speech disorder based on a matrix of severity ratings to be used as general guidelines for assisting speech-language pathologists with dismissal decisions. (See Appendices J and K.)

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[15] According to ASHA's Code of Ethics, "Individuals shall not guarantee the results of any treatment or procedure, directly or by implication; however, they may make a reasonable statement of prognosis" (ASHA, 1994d, p. 1).

The speech-language pathologist considers the federal mandates, state regulations and guidelines, and local education agency dismissal criteria. ASHA's Report on Admission/Dismissal Criteria (1994a) is also available to assist with dismissal decisions.

Supervision

The speech-language pathologist may, given his/her position, provide supervision to speech-language pathologists, and/or support personnel, when supervisory requirements have been met. The term *clinical supervision* refers to the tasks and skills of clinical teaching related to the interaction between the speech-language pathologist and the client. Clinical supervision in speech-language pathology is a distinct area of expertise and practice requiring specific competencies (ASHA, 1985b, 1989d). Supervisors are often role models for the beginning professional or support personnel. Clinical supervision within the school setting relates to supervision of:

- colleagues who are completing their clinical fellowship requirement for ASHA's certificate of clinical competence (CCC) (ASHA, 1994b; 1997b; 1997g)
- speech-language pathology assistants in accordance with ASHA's *Code of Ethics* (1994d); the *Guidelines for the Training, Credentialing, Use and Supervision of Speech-Language Pathology Assistants* (ASHA, 1996a); and state regulations and guidelines for the use of support personnel
- university practicum students according to specific university guidelines, state regulations and guidelines, and ASHA (1994h)
- school-approved volunteers who assist with clerical and materials management within the speech-language program

An administrator/supervisor of a school *program* should have the expertise and competencies required of a supervisor (e.g., knowledge of the law, budgets, ethics and performance appraisals). These competencies may be obtained through continuing education opportunities, additional coursework, and other programs in the supervisory process. That administrator/supervisor may be the person who supervises and conducts the performance appraisal of the speech-language pathologist. (See performance appraisal, p. 59.)

Documentation and Accountability

Documentation and accountability are required for each of the core roles of the school speech-language pathologist (see Table 12). Documentation is needed for the student; family; federal, state, and local requirements; and third-party insurance payers.

Clear and comprehensive records are necessary to justify the need for intervention, to document the effectiveness of that intervention, and for legal purposes. Professionals in all positions and settings must be concerned with documentation. ASHA requires that "accurate and complete records [be] maintained for each client and [be] protected with respect to confidentiality" (ASHA, 1992b, p. 64; see also ASHA, 1994c; 1994f).

Table 12. Core roles and required documentation.

Core Roles	Examples of Documentation
PREVENTION	Team meetings, schedules, plans, regular education classroom program
IDENTIFICATION	Observation notes, anecdotal records, cumulative file, medical history, teacher checklists, referral form
ASSESSMENT/ EVALUATION	Standardized test protocols, nonstandardized interview and observation notes, portfolios, assignment reports, parent input
ELIGIBILITY DETERMINATION	Federal, state or local education agency (SEA, LEA) eligibility criteria Severity ratings and interdisciplinary team report (when applicable)
IEP/IFSP DEVELOPMENT	Individualized Education Program (IEP) Individualized Family Service Plan (IFSP) Parent, teacher and other professional input
CASELOAD MANAGEMENT	IEP/IFSP, schedule, attendance records, progress reports
INTERVENTION	Standardized and descriptive assessment information, treatment outcomes measures, third-party documentation, goals and objectives, benchmarks, lesson plans, treatment notes, progress reports
COUNSELING	Assessment data, anecdotal records, progress notes, release of information forms, record of referrals
RE-EVALUATION	Federal, SEA, or LEA documentation
TRANSITION	Federal, SEA, or LEA documentation
DISMISSAL	Federal, SEA, or LEA dismissal criteria Severity ratings and interdisciplinary team report (when applicable)
SUPERVISION	Performance appraisals, observation notes

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Federal, State, Local Compliance and Procedural Safeguards

It is the role of the speech-language pathologist to adhere to federal mandates, state regulations and guidelines, and local education agency policies and procedures related to parent/guardian notification, compliance documentation, and procedural safeguards [Section 615(a-d)].

Progress Reports/Report Cards

Parents must be informed of their child's progress "at least as often as nondisabled children's progress" [Section 614(d-A)viii]. The progress report includes:

- the student's progress toward the annual goals
- the extent that progress is sufficient to enable the child to achieve the goals by the end of the year

Third-Party Documentation

Speech-language pathology services are a covered benefit under many private medical insurance plans as well as the Medicaid program. State and local education agencies are authorized to use whatever federal, state, local, and private funding sources, including family insurance, that are available to pay for services included on a student's IEP. School districts may seek Medicaid payment for speech-language pathology services provided to Medicaid-eligible students. Agreements governing payment and procedures must be established between the applicable school district and the state Medicaid agency.

Speech-language pathologists providing services under Medicaid or other third-party insurance companies are responsible for:

- investigating and understanding the state's Medicaid policies and procedures
- meeting minimum qualified personnel standards as defined by federal and state regulations
- being aware of the parent's right to informed consent
- providing the parent with sufficient information about third-party reimbursement processes
- documenting treatment sessions
- following billing and supervision procedures
- being familiar with health insurance and managed care
- being familiar with professional liability issues

(ASHA, 1991e; 1991f; 1994e; 1994g)

Treatment Outcomes Measures

Treatment outcomes measures document evidence of the effectiveness of intervention on communication abilities. They are typically based on skills that may be observed and recorded, and are not dependent on the treatment approach or method of service delivery. Within the school setting, outcomes may reflect performance that relates to the student's educational functioning within the classroom and with peers during the school day. ASHA is currently developing a National Outcomes Measurement System (NOMS) for speech-language pathology in pre-K and K–12 educational settings. (ASHA, 1998g, 1999) Additional components of NOMS are being developed in health care settings and audiology.

Responsibilities relating to collecting treatment outcomes data are to:

- collect and record data for eligibility, caseload planning and management, and dismissal purposes
- collect and record data that reflect functional skills and performances
- use functional communication measures or functional status measures that reflect communication/educational change and consumer satisfaction
- integrate functionally based goals or benchmarks into intervention programs
- use data collected to promote changes in service delivery

(ASHA, 1997c, 1998g)

Performance Appraisal

Documentation is an important task of the supervisor in schools. Supervisors are responsible for conducting performance appraisals of those being supervised. Performance appraisal is the practice of evaluating job-related behaviors. Professional performance appraisal is an important factor in facilitating a growth process that should continue throughout an individual's professional career (ASHA, 1993c; Dellegrotto, 1991). Performance appraisal is conducted to:

- assist the person being supervised in the development of skills as outlined in the core roles
- assist the person being supervised in the description and measurement of his/her progress and achievement
- assist the person being supervised in developing skills of self-evaluation
- evaluate skills with the person being supervised for purposes of grade assignment, completion of the clinical fellowship requirements, and/or professional advancement

(ASHA, 1985b)

Risk Management

School speech-language pathologists must be knowledgeable about risk management procedures in relation to chronic communicable disease prevention and management. Speech-language pathologists should follow safety and health precautions that:

- ensure the safety of the patient/client and clinician and adhere to universal health precautions (e.g., prevention of bodily injury and transmission of infectious disease)
- ensure decontamination, cleaning, disinfection, and sterilization of multiple-use equipment before reuse according to facility-specific infection control policies and procedures and according to manufacturer's instructions

(ASHA, 1990a, 1991a, 1994f, 1997e)

III. Additional Roles And Opportunities

This section describes additional roles and opportunities for school-based speech-language pathologists. Table 13 provides an outline for those roles.

Table 13. Additional roles and opportunities for school-based speech-language pathologists.

Additional Roles	Opportunities
COMMUNITY AND PROFESSIONAL PARTNERSHIPS	Audiologists Community-based speech-language pathologists Health care providers Media/community Parents/parent groups Preschool personnel Professional organizations Universities
PROFESSIONAL LEADERSHIP OPPORTUNITIES	Specialization Mentor Research Schoolwide participation
ADVOCACY	Students Programs Facilities

Community and Professional Partnerships

School-based speech-language pathologists establish community and professional partnerships beyond the school setting to meet student and program needs. These partnerships include cooperation with audiologists, community-based speech-language pathologists, health care providers, the media and community, parents and parent groups, preschools, professional organizations, and universities. The partnerships involve frequent, extensive, and open communication. Speech-language pathologists often coordinate alliances and seek ongoing input from participating partners. Cooperative partnerships enhance the quality of services provided for students with communication disorders and contribute to the success of school-based speech and language programs.

Audiologists

The role of speech-language pathologists in providing services to students with hearing loss, deafness, and/or central auditory processing disorders is unique, and special considerations apply. Many students with hearing loss and/or central auditory processing disorders served by speech-language pathologists may benefit from hearing aids, cochlear implants, an assistive listening device or system, environmental modification, large area amplification systems, and/or instructional modification. In addition to communication with audiologists from education settings, a close association with community-based audiologists is essential in providing services for students receiving their care.

Speech-language pathologists collaborate with audiologists to:

- provide or review hearing screenings and monitor the audiologic findings of students, including those on the speech-language pathologist's caseload
- make referrals for audiologic evaluations
- collaborate with audiologists to promote improved acoustic environments and accessibility of classrooms and other school settings that facilitate communication and prevent noise-induced hearing losses
- assist the audiologist in monitoring hearing aids, cochlear implants, group/classroom amplification (FM auditory trainers), and assistive listening devices or sound field systems in order to maximize acoustic accessibility of students with hearing loss or other auditory disorders
- assist the audiologist and the educators of students with hearing loss in providing consultation with other educational staff to develop instructional modifications and/or to encourage use of technology, interpreters, and other accommodations to meet the needs of students with hearing loss or deafness
- share pertinent information with educational staff regarding language levels and communication needs as related to the student's hearing loss
- facilitate an understanding by nondisabled peers of the nature of hearing loss and deafness and the communication styles or modes of students with hearing loss and deafness

Community-Based Speech-Language Pathologists

School-based speech-language pathologists establish communication links with area speech-language pathology private practitioners and with employees of diagnostic and treatment facilities that provide communication disorders services to preschool and school-age children to:

- coordinate services for mutual clients, assuring opportunities for optimal benefits for the students and their families
- form alliances for mutual referral resources
- share professional information and expertise among colleagues
- facilitate transition of services from community to public school speech-language programs

Health Care Providers

Speech-language pathologists collaborate with health care providers and agencies to:

- prevent communication impairments through preschool interdisciplinary screening programs and early awareness initiatives
- coordinate diagnostic and intervention programs for children whose communication development or swallowing is affected by health-related conditions and disorders

- consult with professionals serving on diagnostic and treatment recommendation teams or clinics developed for specific physiologically based conditions or disorders (e.g., cleft palate or cerebral palsy)

Media/Community

Speech-language pathologists work with the media and the community to:

- initiate public awareness programs via promotional announcements, public radio and television presentations, school Internet communications, and in the print media
- collaborate with other speech, language, audiology, and hearing professionals in cooperative public information projects such as Better Hearing and Speech Month, health or career fairs, and departmental open-houses and visitation programs
- establish communications with community service groups, nonprofit charity organizations, allied agencies, and the business community for the purpose of informing, educating, and seeking grants for communication disorders programs in the schools
- create and distribute public information brochures that describe speech-language pathology programs in the schools and the referral procedures for those programs

Parents/Parent Groups

Speech-language pathologists develop partnerships with parents, families, and parent support groups to:

- provide information on the prevention of communication disorders
- promote communication development and literacy skills of infants and young children
- provide information and recommendations for positive speech and language development and home intervention strategies
- advocate for the communication needs of students
- gain information about how the school speech-language program can best meet the needs of students and families

Preschool Personnel

Alliances with personnel from preschool child care centers, nursery schools and Head Start programs are promoted by the speech-language pathologist at sites that provide services to early childhood students. The partnership is established to:

- consult with professional and paraprofessional staff members to facilitate educational success and social communication skills
- collaborate with families and preschool center staff members to enhance the communication skills of young children before school entry
- monitor the progress of children identified as at risk for and/or exhibiting communication impairments who are enrolled at the community preschool sites
- establish procedures for appropriate referrals to school-based speech-language pathologists for children exhibiting communication problems
- facilitate appropriate transition to public school programs

Professional Organizations

Speech-language pathologists are actively involved in national, state, and local professional organizations to:

- promote professional growth through attending and presenting at national, state, and local continuing education programs, workshops, and conferences
- read, author, or edit articles for professional journals and other publications
- participate on committees, boards, councils, and task forces to advocate for the profession and for students with communication disorders
- volunteer for leadership roles at the local, state, and national levels
- participate in ASHA Special Interest Divisions or other professional groups to network with colleagues regarding specific areas of professional interest or expertise, thereby enriching growth opportunities and participatory contributions (see Appendix B).

Universities

Speech-language pathologists may collaborate with universities to:

- provide practicum experiences in the school setting
- serve as adjunct faculty members
- lecture to promote understanding of the scope of practice and the roles and responsibilities of the speech-language pathologist within the school setting
- recruit upcoming graduates by encouraging university students to consider school-based career options
- provide input for university program directors and faculty regarding knowledge and skills needed to be an effective school-based speech-language pathologist
- form alliances with university diagnostic and treatment clinics for mutual referral resources and supplemental treatment options for students
- encourage regular and continuing education course work offerings and professional development opportunities that focus on the needs of the school-based speech-language pathologist
- develop cooperative research projects relating to school-age populations

Professional Leadership Opportunities

School-based speech-language pathologists have multiple professional opportunities beyond core roles and responsibilities. These opportunities allow speech-language pathologists to assume leadership roles, to develop initiatives, and to use their personal attributes and professional expertise to provide positive and significant contributions to students, educators, families, and the community. The decision to participate in these professional activities is made by each individual, after considering professional responsibilities, time constraints, personal interests and expertise.

Specialization

Speech-language pathologists who have acquired specialized training in a particular area can serve as a specialist or mentor to other school-based providers. Some school districts have designated specialists within their speech-language departments to meet the needs of various *individuals, especially those with lower-incidence disabilities. The need for specialists is* dependent upon the school's unique population of students with communication disorders as well as the expertise of the speech-language pathologist(s) on staff.

Examples of specialty positions and their related duties follow. The list is not meant to be all-inclusive.

- Assistive Technology Specialist: provides assessments for students, support to parents and classroom teachers, and technical assistance to staff responsible for students identified as requiring alternative communication systems; recommends assistive devices that will enable students to communicate and participate in regular classrooms
- Autism Specialist: provides technical assistance to staff responsible for students identified as autistic or exhibiting behaviors characteristic of the syndrome; provides assistance to speech-language pathologists, classroom teachers, parents, students, and administrators
- Bilingual Specialist: provides evaluations for bilingual students (e.g., English/ Spanish); assists in scheduling a bilingual interpreter/translator for parent communication and or assessment purposes; assists school-based speech-language pathologists regarding programming for these students, or may provide direct intervention
- Cleft Palate Specialist: works with a team of medical and dental specialists; provides evaluation and management of velopharyngeal function related to hypernasality and nasal air flow disorders; provides inservices to schools related to cleft lip/palate, craniofacial anomalies and related disorders of velopharyngeal dysfunction, consults regarding management of maladaptive/compensatory articulation habits related to disorders of velopharyngeal dysfunction and other resonance disorders
- Diagnostic Specialist: provides comprehensive evaluations for students referred for, or enrolled in, specialized language programs; assists speech-language pathologists with difficult-to-test students
- Fluency Specialist: provides technical assistance to speech-language pathologists, teachers, and parents or provides direct services to students with fluency disorders
- Resource Specialist: provides guidance for newly hired speech-language pathologists to assist in the transition from academia to practice or provides support for speech-language pathologists who transferred to a new level or setting
- Voice Specialist: provides assessments and/or technical assistance for students with suspected or confirmed voice disorders

Mentor

Mentoring can be a critical element in building a career and attaining job satisfaction. It is effectively used in many organizations as a way to develop a new professional's knowledge of values, beliefs, and practices. It can help in learning to apply clinical judgment in a variety of scenarios. This translates into a more productive, efficient, and effective professional and has been reported to contribute to successful retention and career satisfaction, better decision making, and greater perceived competence (Horgam & Simeon, 1991; Huffman, 1994).

The speech-language pathologist has the opportunity to:

- serve as a mentor to newly practicing school-based speech-language pathologists
- provide assessment information and/or technical assistance in specific disorder areas or service delivery options
- encourage advocacy efforts or provide advice on administrative issues

(ASHA, 1992a)

Research

Speech-language pathologists collect treatment outcomes data in the school-based setting. School-based speech-language pathologists provide data to administrators, parents, and teachers on the outcomes of services to students with communication disabilities. The general education environment offers the opportunity to participate in research that can advance the professions. (ASHA, 1997c; O'Toole, Logemann, & Baum, 1998).

The speech-language pathologist may:

- promote opportunities for university faculty and students to develop research projects with school populations
- assist in obtaining cooperation from school administration, staff, and parents to implement research initiatives
- seek funding for research opportunities
- conduct research or collaborate with educational staff on research projects
- participate in treatment outcomes projects

Schoolwide Participation Opportunities

The role of the school-based speech-language pathologist as an integral member of the total school staff is realized by active participation in school activities and committees. Many opportunities exist for the speech-language pathologist in the schools to make positive contributions as a cooperative, visible team player.

Recognizing that each school situation is unique, the speech-language pathologist may have the opportunity and may choose to become involved in schoolwide initiatives that will benefit the communication skills of all students in the school. Initiatives may include:

- participating with professional colleagues in the development and revision of curricula to promote greater emphasis on communication skills within the general education environment
- participating in district- and schoolwide professional activities, such as committees and councils designated for curriculum development, problem solving, conflict mediation and violence prevention teams, professional development, parent support and volunteer groups, recruitment, community relations, and handbook/guidelines development
- participating in school events, projects, and meetings, such as student performances, assemblies, field trips, literacy and reading projects, and prekindergarten orientation programs

- volunteering for leadership roles within the school district and community relating to educational and communication enhancement goals with students
- representing speech-language pathologists in contract negotiations regarding salary scale, positive working conditions, and program development

Advocacy

The school-based speech-language pathologist is a strong advocate for students enrolled in the speech-language program and works cooperatively to achieve the program goals and objectives. A student's achievement is enhanced when speech-language pathologists and school administrators cooperatively team for effective planning, coordination, and implementation of speech-language programs as part of the total educational system. School-based speech-language pathologists communicate with local, state, and federal policymakers as well as regulatory and legislative bodies about issues important to students with communication disorders.

To assure quality service conditions for their students, school-based speech-language pathologists advocate for:

- adequate administrative support to carry out their roles and responsibilities
- sufficient time within the workday and week for planning, diagnostics, observations, report writing, supervisory responsibilities, required paperwork, consultations with parents and teachers, interdisciplinary meetings, and regularly scheduled direct and indirect services for students on the caseload (ASHA, 1993b)
- an array of services to address differences in type and severity of disorders
- adequate staffing levels to maintain manageable caseloads and for the financial resources necessary to provide a sufficient number of qualified personnel
- professional development opportunities to maintain a high-quality program through access to in-service training, professional conferences, site visits to observe other speech-language pathologists and students, and a professional library of current journals, books, and videotapes
- adequate facilities for student evaluation and intervention that meet federal, state, and local safety and instructional standards (U.S. Congress, 1990a; ASHA, 1992b)
- proper work conditions (e.g., lighting, natural and artificial ventilation, acoustical treatment, heating/air conditioning)
- financial resources for appropriate equipment, materials, and diagnostic instruments to provide services for students of varying ages, abilities, and disorders
- availability of computer hardware and software necessary for instruction, assessment, records, reports, and program management
- policies and procedures consistent with the school's mission and goals
- the communication needs of students in the total school environment

Advocacy training materials, including M-Power Box: The Power of One (School Version), are available from ASHA for school-based speech-language pathologists (ASHA, 1998e).

IV. Summary

The roles and responsibilities specific to school-based speech-language pathologists have been shaped by national and state legislation and regulations; societal factors; and by the scope, standards, and ethics of the profession. These ASHA guidelines were developed to clarify the speech-language pathologist's roles and responsibilities within the school setting. Speech-language pathologists, school and district administrators, lobbyists, and legislators may use these guidelines to develop, modify, or describe high-quality, school-based speech-language programs.

Students with communication disorders, their families, and the community benefit from the speech-language pathologist's professional expertise in the field of speech, language, and communication. The speech-language pathologist is an essential member of the interdisciplinary, IEP, and educational teams. The core roles of the school-based speech-language pathologist are prevention, identification, assessment, evaluation, eligibility determination, IEP/IFSP development, caseload management, intervention, counseling, re-evaluation, transition, and dismissal for students with language, articulation/phonology, fluency, voice/resonance, or swallowing disorders. Documentation/accountability and supervision are also considered core roles. Specific responsibilities for each of these core roles are further delineated within these guidelines.

Evolving roles for the school-based speech-language pathologist are discussed. The speech-language pathologist's knowledge of normal versus disordered communication is valuable in (a) distinguishing language differences from disorders for bilingual students; (b) promoting understanding of social dialects for students from culturally and linguistically diverse populations; and (c) evaluating students with cognitive, sensory, neurological, orthopedic, or other health impairments who may also have communication disorders. The speech-language pathologist's knowledge is an asset to the educational team when creating teaching strategies to enhance literacy or social and behavioral communication skills for all students.

Involvement in additional professional opportunities are increasingly important to the integrity of school-based speech-language pathology programs. These opportunities include community and professional partnerships, leadership initiatives, and advocacy efforts.

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Appendix A

AMERICAN
SPEECH-LANGUAGE-
HEARING
ASSOCIATION

Code of Ethics

Last Revised January 1, 1994

Preamble

The preservation of the highest standards of integrity and ethical principles is vital to the responsible discharge of obligations in the professions of speech-language pathology and audiology. This Code of Ethics sets forth the fundamental principles and rules considered essential to this purpose.

Every individual who is (a) a member of the American Speech-Language-Hearing Association, whether certified or not, (b) a nonmember holding the Certificate of Clinical Competence from the Association, (c) an applicant for membership or certification, or (d) a Clinical Fellow seeking to fulfill standards for certification shall abide by this Code of Ethics.

Any action that violates the spirit and purpose of this Code shall be considered unethical. Failure to specify any particular responsibility or practice in this Code of Ethics shall not be construed as denial of the existence of such responsibilities or practices.

The fundamentals of ethical conduct are described by Principles of Ethics and by Rules of Ethics as they relate to responsibility to persons served, to the public, and to the professions of speech-language pathology and audiology.

Principles of Ethics, aspirational and inspirational in nature, form the underlying moral basis for the Code of Ethics. Individuals shall observe these principles as affirmative obligations under all conditions of professional activity.

Rules of Ethics are specific statements of minimally acceptable professional conduct or of prohibitions and are applicable to all individuals.

Reference this material as: American Speech-Language-Hearing Association (1994). Code of ethics. *Asha, 36* (March, Suppl. 13) pp. 1-2.

Index terms: Ethics, code of ethics, issues in ethics

Principle of Ethics I

Individuals shall honor their responsibility to hold paramount the welfare of persons they serve professionally.

Rules of Ethics

A. Individuals shall provide all services competently.

B. Individuals shall use every resource, including referral when appropriate, to ensure that high-quality service is provided.

C. Individuals shall not discriminate in the delivery of professional services on the basis of race or ethnicity, gender, age, religion, national origin, sexual orientation, or disability.

D. Individuals shall fully inform the persons they serve of the nature and possible effects of services rendered and products dispensed.

E. Individuals shall evaluate the effectiveness of services rendered and of products dispensed and shall provide services or dispense products only when benefit can reasonably be expected.

F. Individuals shall not guarantee the results of any treatment or procedure, directly or by implication; however, they may make a reasonable statement of prognosis.

G. Individuals shall not evaluate or treat speech, language, or hearing disorders solely by correspondence.

H. Individuals shall maintain adequate records of professional services rendered and products dispensed and shall allow access to these records when appropriately authorized.

I. Individuals shall not reveal, without authorization, any professional or personal information about the person served professionally, unless required by law to do so, or unless doing so is necessary to protect the welfare of the person or of the community.

J. Individuals shall not charge for services not rendered, nor shall they misrepresent,[1] in any fashion, services rendered or products dispensed.

K. Individuals shall use persons in research or as subjects of teaching demonstrations only with their informed consent.

L. Individuals whose professional services are adversely affected by substance abuse or other health-related conditions shall seek professional assistance and, where appropriate, withdraw from the affected areas of practice.

Principle of Ethics II

Individuals shall honor their responsibility to achieve and maintain the highest level of professional competence.

Rules of Ethics

A. Individuals shall engage in the provision of clinical services only when they hold the appropriate Certificate of Clinical Competence or when they are in the certification process and are supervised by an individual who holds the appropriate Certificate of Clinical Competence.

B. Individuals shall engage in only those aspects of the professions that are within the scope of their competence, considering their level of education, training, and experience.

C. Individuals shall continue their professional development throughout their careers.

D. Individuals shall delegate the provision of clinical services only to persons who are certified or to persons in the education or certification process who are appropriately supervised. The provision of support services may be delegated to persons who are neither certified nor in the certification process only when a certificate holder provides appropriate supervision.

E. Individuals shall prohibit any of their professional staff from providing services that exceed the staff member's competence, considering the staff member's level of education, training, and experience.

F. Individuals shall ensure that all equipment used in the provision of services is in proper working order and is properly calibrated.

Principle of Ethics III

Individuals shall honor their responsibility to the public by promoting public understanding of the professions, by supporting the development of services designed to fulfill the unmet needs of the public, and by providing accurate information in all communications involving any aspect of the professions.

Rules of Ethics

A. Individuals shall not misrepresent their credentials, competence, education, training, or experience.

B. Individuals shall not participate in professional activities that constitute a conflict of interest.

C. Individuals shall not misrepresent diagnostic information, services rendered, or products dispensed or engage in any scheme or artifice to defraud in connection with obtaining payment or reimbursement for such services or products.

D. Individuals' statements to the public shall provide accurate information about the nature and management of communication disorders, about the professions, and about professional services.

E. Individuals' statements to the public — advertising, announcing, and marketing their professional services, reporting research results, and promoting products — shall adhere to prevailing professional standards and shall not contain misrepresentations.

Principle of Ethics IV

Individuals shall honor their responsibilities to the professions and their relationships with colleagues, students, and members of allied professions. Individuals shall uphold the dignity and autonomy of the professions, maintain harmonious interprofessional and intraprofessional relationships, and accept the professions' self-imposed standards.

Rules of Ethics

A. Individuals shall prohibit anyone under their supervision from engaging in any practice that violates the Code of Ethics.

B. Individuals shall not engage in dishonesty, fraud, deceit, misrepresentation, or any form of conduct that adversely reflects on the professions or on the individual's fitness to serve persons professionally.

C. Individuals shall assign credit only to those who have contributed to a publication, presentation, or product. Credit shall be assigned in proportion to the contribution and only with the contributor's consent.

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[1] For purposes of this Code of Ethics, misrepresentation includes any untrue statements or statements that are likely to mislead. Misrepresentation also includes the failure to state any information that is material and that ought, in fairness, to be considered.

D. Individuals' statements to colleagues about professional services, research results, and products shall adhere to prevailing professional standards and shall contain no misrepresentations.

E. Individuals shall not provide professional services without exercising independent professional judgment, regardless of referral source or prescription.

F. Individuals shall not discriminate in their relationships with colleagues, students, and members of allied professions on the basis of race or ethnicity, gender, age, religion, national origin, sexual orientation, or disability.

G. Individuals who have reason to believe that the Code of Ethics has been violated shall inform the Ethical Practice Board.

H. Individuals shall cooperate fully with the Ethical Practice Board in its investigation and adjudication of matters related to this Code of Ethics.

APPENDIX B

ASHA SCHOOL-RELATED RESOURCES

American Speech-Language-Hearing Association
10801 Rockville Pike
Rockville, MD 20852
301-897-5700

ACCESS ASHA

Action Center Toll Free Numbers:
Answer Line (IVR) 1-888-321-ASHA
Consumers 1-800-638-8255
Members 1-800-498-2071
Product Sales 1-888-498-6699
Voice Mail (Long Distance) 1-800-274-2376
Fax-on-Demand 703-531-0866

- ASHA Web site — http://www.asha.org

- ASHA School Services

- ASHA Special Interest Divisions (SIDs)
    1. Language Learning and Education
    2. Neurophysiology and Neurogenic Speech and Language Disorders
    3. Voice and Voice Disorders
    4. Fluency and Fluency Disorders
    5. Speech Science and Orofacial Disorders
    6. Hearing and Hearing Disorders: Research and Diagnostics
    7. Aural Rehabilitation and Its Instrumentation
    8. Hearing Conservation and Occupational Audiology
    9. Hearing and Hearing Disorders in Childhood
    10. Issues in Higher Education
    11. Administration and Supervision
    12. Augmentative and Alternative Communication
    13. Swallowing and Swallowing Disorders (Dysphagia)
    14. Communication Disorders and Sciences in Culturally and Linguistically Diverse Populations
    15. Gerontology

    Note: Some Special Interest Divisions have listservs.

- State Speech-Language-Hearing Associations

- School Allied and Related Professional Organizations (ARPOs)

    - Council of Language, Speech and Hearing Consultants in State Education Agencies

    - Public School Caucus

    - Council of School Supervisors and Administrators

Contact ASHA for further information on the above resources, other related professional contacts or resources such as position papers, guidelines, technical reports and relevant papers.

APPENDIX C

GOALS 2000: EDUCATION AMERICA ACT
NATIONAL EDUCATION GOALS

GOAL 1

"By the year 2000, all children in America will start school ready to learn.

GOAL 2:

"By the year 2000, the high school graduation rate will increase to at least 90 percent.

GOAL 3:

"By the year 2000, all children will leave grade 4, 8, and 12 having demonstrated competency over challenging subject matter including English, Mathematics, Science, Foreign Languages, Civics and Government, Economics, Arts, History, and Geography, and every school in America will ensure that all students learn to use their minds well, so that they may be prepared for responsible citizenship, further learning, and productive employment in our nation's modern economy.

GOAL 4:

"By the year 2000, the nation's teaching force will have access to programs for the continued improvement of their professional skills and the opportunity to acquire the knowledge and skills needed to instruct and prepare all American students for the next century.

GOAL 5:

"By the year 2000, United States students will be first the world in Mathematics and Science Achievement.

GOAl 6:

"By the year 2000, every adult American will be literate and will possess the knowledge and skills necessary to compete in a global economy and exercise the rights and responsibilities of citizenship.

GOAL 7:

"By the year 2000, every school in the United States will be free of drugs, violence, and the unauthorized presence of firearms and alcohol and will offer a disciplined environment conducive to learning.

GOAL 8:

"By the year 2000, every school will promote partnerships that will increase parental involvement and participation in promoting the social, emotional, and academic growth of children."

Source: National Education Goals Panel. (1996). *The National Education Goals Report*. Washington, DC.

APPENDIX D

SCHOOL REFORM ISSUES RELATED TO SPEECH-LANGUAGE PATHOLOGY

Analysis of recent and proposed changes in educational policies and practices at national, state and local levels:

1. Language and communication skills are the foundation of all learning.

2. Effective communication and language skills are fundamental for achievement of the eight national education goals.

3. Speech-language pathologists and audiologists are uniquely trained to enhance students' language skills. Such professionals provide a valuable contribution to learning, in general, and school reform initiatives, more specifically.

4. Improved outcomes for consumers should be fundamental in school reform initiatives.

5. The rights and protections of individuals with disabilities must be maintained as educational policies and practices change.

6. Providing initial preparation and continuing education to speech-language pathology and audiology professionals affects the quality of education that students with communication disorders receive.

7. The availability of qualified service providers affects each school district's ability to meet the communication needs of its students.

8. Service delivery for students with communication disorders is undergoing significant change.

9. Technology will play an increasingly dominant role in education, affecting learners of all types, ages, and needs.

10. The effectiveness of school reform initiatives will depend on the availability and efficient use of resources.

Source: American Speech-Language-Hearing Association. (1997). *Trends and issues in school reform and their effects on speech-language pathologists, audiologists, and students with communication disorders.* ASHA Desk Reference (Vol. 4, 310-310i).

APPENDIX E

ADVANTAGES AND DISADVANTAGES OF TYPES OF ASSESSMENTS

	Advantages	*Disadvantages*
Norm-referenced language tests	Designed for diagnosis Allow comparison with age or grade peer group on an objective standard Facilitate comparisons across several domains to assess discrepancies and broad strengths/weaknesses	Not designed for identifying specific intervention objectives Norm group is representative of national samples, but may not be representative enough of the student's background
Criterion-referenced tests	Test for regularities in performances against a set of criteria Useful for designing interventions, interfacing with curriculum objectives, and describing where a student is along a continuum of skills	Not designed for use in making program placement or eligibility decisions
Checklists	Easy to administer and practical Can give a broad evaluation in areas judged important Address crucial academic skills upon which referral is often based	Not designed to evaluate peer- or age-group level
Structured observations	Permit guided evaluations of communication in context Can focus on several aspects at once Occur on-site; are based on reality	Can be time consuming Presence of observer may alter behavior, especially in teens

Source: Ohio Department of Education (1991). *Ohio handbook for the identification, evaluation, and placement of children with language problems.* Columbus, OH: Author. Reprinted by permission.

Note. Other types of assessments are described in the assessment section of this Guidelines document.

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APPENDIX F

DEVELOPMENTAL MILESTONES FOR SPEECH AND LANGUAGE

AGE	LANGUAGE AND SPEECH BEHAVIORS
1 yr.	recognizes his or her name
	understands simple instructions
	initiates familiar words, gestures, and sounds
	uses "mama," "dada," and other common nouns
1 ½ yrs.	uses 10 to 20 words, including names
	recognizes pictures of familiar persons and objects
	combines two words, such as "all gone"
	uses words to make wants known, such as "more," "up"
	points and gestures to call attention to an event and to show wants
	follows simple commands
	imitates simple actions
	hums, may sing simple tunes
	distinguishes print from nonprint
2 yrs.	understands simple questions and commands
	identifies body parts
	carries on conversation with self and dolls
	asks "what" and "where"
	has sentence length of two to three words
	refers to self by name
	names pictures
	uses two-word negative phrases, such as "no want"
	forms some plurals by adding "s"
	has about a 300-word vocabulary
	asks for food and drink
	stays with one activity for six to seven minutes
	knows how to interact with books (right side up, page turning from left to right)
2 ½ yrs.	has about a 450-word vocabulary
	gives first name
	uses past tense and plurals; combines some nouns and verbs
	understands simple time concepts, such as "last night," "tomorrow"
	refers to self as "me" rather than name
	tries to get adult attention with "watch me"
	likes to hear same story repeated
	uses "no" or "not" in speech
	answers "where" questions
	uses short sentences, such as "me do it"
	holds up fingers to tell age
	talks to other children and adults
	plays with sounds of language

Appendix F (continued)

3 yrs.	matches primary colors; names one color
	knows night and day
	begins to understand prepositional phrases such as "put the block under the chair"
	practices by talking to self
	knows last name, sex, street name, and several nursery rhymes
	tells a story or relays an idea
	has sentence length of three to four words
	has vocabulary of nearly 1,000 words
	consistently uses m, n, ng, p, f, h, and w
	draws circle and vertical line
	sings songs
	stays with one activity for eight to nine minutes
	asks "what" questions
4 yrs.	points to red, blue, yellow, and green
	identifies crosses, triangles, circles, and squares
	knows "next month," "next year," and "noon"
	has sentence length of four to five words
	asks "who" and "why"
	begins to use complex sentences
	correctly uses m, n, ng, p, f, h, w, y, k, b, d, and g
	stays with activity for 11 to 12 minutes
	plays with language, e.g., word substitutions
5 yrs.	defines objects by their use and tells what they are made of
	knows address
	identifies penny, nickel, and dime
	has sentence length of five to six words
	has vocabulary of about 2,000 words
	uses speech sounds correctly, with the possible exceptions being y, th, j, s/z, zh, and r
	knows common opposites
	understands "same" and "different"
	counts ten objects
	uses future, present, and past tenses
	stays with one activity for 12 to 13 minutes
	questions for information
	identifies left and right hand on self
	uses all types of sentences
	shows interest and appreciation for print
6–7 yrs.	identifies most sounds phonetically
	forms most sound-letter associations
	segments sounds into smallest grammatical units
	begins to use semantic and syntactic cues in writing and reading
	begins to write simple sentences with vocabulary and spelling appropriate for age; uses these sentences in brief reports and creative short stories
	understands time and space concepts, such as before/after, second/third
	comprehends mathematical concepts, such as "few," "many," "all," and "except"

Appendix F (continued)

8, 9, 10, 11 yrs.	by second grade, accurately follows oral directions for action and thereby acquires new knowledge
11, 12, 13, 14 yrs.	substitutes words in oral reading, sentence recall, and repetition; copying and writing dictation are minimal comprehends reading materials required for various subjects, including story problems and simple sentences by fourth grade, easily classifies words and identifies relationships, such as "cause and effect"; defines words (sentence context); introduces self appropriately; asks for assistance exchanges small talk with friends initiates telephone calls and takes messages gives directions for games; summarizes a television show or conversation begins to write effectively for a variety of purposes understands verbal humor
11, 12, 13, 14 yrs.	displays social and interpersonal communication appropriate for age forms appropriate peer relationships begins to define words at an adult level and talks about complex processes from an abstract point of view; uses figurative language organizes materials demonstrates good study skills follows lectures and outlines content through note taking paraphrases and asks questions appropriate to content
Adolescence and young adult	interprets emotions, attitudes, and intentions communicated by others' facial expressions and body language takes role of other person effectively is aware of social space zones displays appropriate reactions to expressions of love, affection, and approval compares, contrasts, interprets, and analyzes new and abstract information communicates effectively and develops competence in oral and written modalities

Source: Ohio Statewide Language Task Force. (1990). Developmental milestones: Language behaviors. *In Ohio Handbook for the Identification, Evaluation and Placement of Children with Language Problems* (1991). Columbus: Ohio Department of Education. Reprinted by permission.

Editor's Note. These milestones are variable due to individual differences and variance in the amount of exposure to oral and written communication.

APPENDIX G

EXAMPLE OF A SEVERITY/INTERVENTION MATRIX

Clinical judgment may necessitate modification of these guidelines.

	Mild—1 Service Delivery Unit Minimum of 15-30 Minutes per Week	Moderate—2 Service Delivery Units Minimum of 31-60 Minutes per Week
Severity of Disorder	Impairment minimally affects the individual's ability to communicate in school learning and/or other social situations as noted by at least one other familiar listener, such as teacher, parent, sibling, peer.	Impairment interferes with the individual's ability to communicate in school learning and/or other social situations as noted by at least one other familiar listener.
Articulation/ Phonology	Intelligible over 80% of the time in connected speech. No more than 2 speech sound errors outside developmental guidelines. Students may be stimulable for error sounds.	Intelligible 50-80% of the time in connected speech. Substitutions and distortions and some omissions may be present. There is limited stimulability for the error phonemes.
Language	The student demonstrates a deficit in receptive, expressive, or pragmatic language as measured by two or more diagnostic procedures/standardized tests. Performance falls from 1 to 1.5 standard deviations below the mean standard score.	The student demonstrates a deficit in receptive, expressive or pragmatic language as measured by two or more diagnostic procedures/standardized tests. Performance falls from 1.5 to 2.5 standard deviations below the mean standard score.
Fluency	2-4% atypical disfluencies within a speech sample of at least 100 words. No tension to minimal tension. Rate and/or Prosody Minimal interference with communication.	5-8% atypical disfluencies within a speech sample of at least 100 words. Noticeable tension and/or secondary characteristics are present. Rate and/or Prosody Limits communication.
Voice	Voice difference including hoarseness, nasality, denasality, pitch, or intensity inappropriate for the student's age is of minimal concern to parent, teacher, student, or physician. Medical referral may be indicated.	Voice difference is of concern to parent, teacher, student, or physician. Voice is not appropriate for age and sex of the student. Medical referral may be indicated.

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APPENDIX G

EXAMPLE OF A SEVERITY/INTERVENTION MATRIX (cont.)

Severe—3 Service Delivery Units Minimum of 61–90 Minutes per Week	Profound—5 Service Delivery Units Minimum of 91 + Minutes per Week
Impairment limits the individual's ability to communicate appropriately and respond in school learning and/or social situations. Environmental and/or student concern is evident and documented	Impairment prevents the individual from communicating appropriately in school and/or social situations.
Intelligible 20–49% of the time in connected speech. Deviations may range from extensive substitutions and many omissions to extensive omissions. A limited number of phoneme classes are evidenced in a speech-language sample. Consonant sequencing is generally lacking. Augmentative communication systems may be warranted.	Speech is unintelligible without gestures and cues and/or knowledge of the context. Usually there are additional pathological or physiological problems, such as neuro-motor deficits or structural deviations. Augmentative communication systems may be warranted.
The student demonstrates a deficit in receptive, expressive or pragmatic language as measured by two or more diagnostic procedures/standardized tests (if standardized tests can be administered). Performance is greater than 2.5 standard deviations below the mean standard score. Augmentative communication systems may be warranted.	The student demonstrates a deficit in receptive, expressive or pragmatic language which *prevents* appropriate communication in school and/or social situations. Augmentative communication systems may be warranted.
9–12% atypical disfluencies within a speech sample of at least 100 words. Excessive tension and/or secondary characteristics are present. Rate and/or Prosody Interferes with communication.	More than 12% atypical disfluencies within a speech sample of at least 100 words. Excessive tension and/or secondary characteristics are present. Rate and/or Prosody Prevents communication.
Voice difference is of concern to parent, teacher, student or physician. Voice is distinctly abnormal for age and sex of the student. Medical referral is indicated.	Speech is largely unintelligible due to aphonia or severe hypernasality. Extreme effort is apparent in production of speech. Medical referral is indicated.

Notes. By the age of 7 years, the student's phonetic inventory is completed and stabilized. (Hodson, 1991).
Adverse impact on the student's educational performance must be documented.
If the collaborative consultation model of intervention is indicated at the meeting, the student receives one additional service delivery unit.

Source: Illinois State Board of Education. (1993). *Speech-language impairment: A technical assistance manual.* Springfield: Author. Reprinted by permission.

Editor's Note. The state or district matrix may be used as a general guideline, but the amount of service per week is determined by the IEP team to meet the individual needs of the students.

APPENDIX H

SIGNS AND EFFECTS OF COMMUNICATION DISORDERS

TYPE OF DISORDER	SIGNS	EFFECTS	
		SOCIAL	LEARNING
LANGUAGE	Student may show impaired comprehension and poor verbal expression.	Student may be excluded from play and group activities. Student may withdraw from group situations.	Student may fail to understand instruction. This may have the same result as missing school altogether. "Learning problems" may result.
ARTICULATION/ SOUND SEQUENCING	Abnormal production of speech sounds; "speech impairment"; speech sounds not typical for student's chronological age.	Student may be ridiculed or given "cartoon character" nickname; may be ignored or excluded from group activities.	Student may have decoding or comprehension problems with respect to specific words.
FLUENCY	Abnormal flow of verbal expression, characterized by impaired rate or rhythm and perhaps "struggle behavior."	Student may be ridiculed by others. Student may begin to avoid speaking in group settings.	Student may do poorly on reports, oral assignments, and reading. Student may withdraw from group learning activities.
VOICE	Abnormal vocal quality, pitch, loudness, resonance, and duration may be evidenced. Child's voice does not sound "right."	Student may be ridiculed, ignored, or excluded from play or group activities.	Student's self-confidence may suffer. This may lead to withdrawal from participation in class, and grades may fall.
HEARING	Student may give evidence of not hearing speech.	Student may appear to be isolated. Student may not participate in group activities as a matter of course.	Student may fail to follow directions or fail to get information from instruction.

School Meeting Kit (ASHA, 1989). Document out of print. Permission granted to reproduce.

APPENDIX I

EXAMPLE OF AN EDUCATIONAL RELEVANCE CHART

____________ does ____/does not ____ demonstrate a communication disorder that negatively impacts the ability to benefit from the
(Name of student) educational process in one or more of the following areas:

- Academic — ability to benefit from the curriculum
- Social — ability to interact with peers and adults
- Vocational — ability to participate in vocational activities

ACADEMIC IMPACT	SOCIAL IMPACT	VOCATIONAL IMPACT
Academic areas impacted by communication problems: ____ Reading ____ Math ____ Language Arts ____ Other: ____________ Impact documented by: ____ Academics below grade level. ____ Difficulty with language-based activities. ____ Difficulty comprehending information presented orally. ____ Difficulty cong information orally. ____ Other: ____________ Comments: ____________ ____________ ____________ ____________ ***** ____ No academic impact reported.	Social areas impacted by communication problems: ____ Communication problem interferes with ability to be understood by adults and/or peers. ____ Student has difficulty maintaining and terminating verbal interactions. ____ Peers tease student about communication problem. ____ Student demonstrates embarrassment and/or frustration regarding communication problem. ____ Other: ____________ Comments: ____________ ____________ ____________ ____________ ***** ____ No social impact reported.	(Applicable for secondary students) Job related skills/competencies student cannot demonstrate due to communication problems: ____ Inability to understand/follow oral directions. ____ Inappropriate response to coworker's supervisor's comments. ____ Unable to answer/ask questions in a coherent/concise manner. ____ Other: ____________ ____________ Comments: ____________ ____________ ____________ ____________ ***** ____ No vocational impact reported.

Source: Lee County, Florida. (1995). In *A resource manual for the development and evaluation of special programs for exceptional students* (p. 20). Tallahassee: Florida Department of Education. Adapted with permission by Lee County and Florida Department of Education.

Note. Example only; state and local procedures may vary.

APPENDIX J

EXAMPLE OF ENTRY/EXIT CRITERIA FOR CASELOAD SELECTIONS
Worksheet

Student's Name:______ __ ____________________ Date:___________ Speech-Language Pathologist:____________________

Section I.

THE STUDENT **HAS/DOES NOT HAVE** A COMMUNICATION DISORDER.

The disorder is in articulation/ ____ language/____ voice/____ fluency/____. (Circle and indicate severity.) Factors preventing designation of a communication disorder are:____

Section II.

THE COMMUNICATION DISORDER **DOES/DOES NOT** IMPACT EDUCATIONAL PERFORMANCE AND **IS/IS NOT** AN EDUCATIONAL DISABILITY.

____ The problem affects social/emotional development or adjustment in the school setting.

____ The problem affects participation in the school program.

____ The problem affects academic achievement (i.e., the acquisition o skills basic to learning—reading, writing, math, etc.).

____ The problem interferes with effective communication (opinions from others who interact with the student must be sought).

Section III.

THE STUDENT **SHOULD/SHOULD NOT BE** CONSIDERED FOR SPEECH LANGUAGE INTERVENTION.

ENTRY/CONTINUATION: RECOMMENDATION IS BASED ON EXISTENCE OF ALL OF THE FOLLOWING AS DETERMINED BY THE SPEECH-LANGUAGE PATHOLOGIST:

____ Student has a communication disorder that is amenable to intervention.

____ Student's cognitive/developmental level appears to be sufficient to acquire targeted skill(s) based on information available at this time.

____ Student's deficit areas require the intervention (direct or indirect) of a speech-language pathologist.

____ Student does not demonstrate adequate compensatory skills for deficit areas.

Source: Montgomery County Public Schools, Rockville, Maryland (1999). Reprinted by permission.

Note: Example only. State and local eligibility and dismissal criteria vary.

EXIT/DISMISSAL: RECOMMENDATION IS BASED ON EXISTENC OF ONE OR MORE OF THE FOLLOWING AS DETERMINED BY THE SPEECH-LANGUAGE PATHOLOGIST:

____ Student has met terminal goals and objectives in deficit areas.

OR

____ Student's communication disorder is related to a medical/physical or emotional problem and is not considered amenable to intervention at this time.

____ Student's cognitive/developmental level does not appear to be sufficient to acquire targeted skill(s) at this time.

____ Student's deficit areas can be managed through classroom modifications or by another service provider.

____ Student has developed compensatory skills that are functional in the deficit areas.

____ Student does not have regular school and/or therapy attendance pattern.

____ Student does not demonstrate motivation to participate.

____ Student does not have the attentional and behavioral skills appropriate for intervention (adaptations and other models of intervention have been tried).

____ Student has made little or no measurable progress in ____ month or _____ years of consistent intervention.

APPENDIX K

EXAMPLE OF A DISMISSAL CRITERIA CHART

Student Name____ Date ____________

School______________________________ Speech-Language Pathologist______________________

The student is eligible for dismissal when reevaluation documents that one or more of the general or specific dismissal criteria is met:

General Dismissal Criteria

- ____ Speech-language problem no longer exists.
- ____ Speech-language problem is no longer a disability.
- ____ Speech-language problem no longer interferes with the student's educational performance including social, emotional, academic, or vocational functioning.
- ____ Student is no longer benefiting from speech-language intervention.
- ____ Given current medical, neurological, physical, emotional, or developmental factors, the student's speech-language performance is within the expected language performance range.
- ____ The student has achieved appropriate compensatory behaviors.

Specific Dismissal Criteria

Phonology	Language	Fluency	Voice
____ The student maintains a minimum of 75 percent correct production of error phonemes on TALK probes administered at 8 and 16 week intervals	____ The student scores less than 2.0 standard deviations below the expected language performance range on appropriate standardized tests which evaluate areas of remediation. ____ The student's language skills are judged to be adequate in remediated areas of content, structure, usage, or auditory processing as determined by informal measures. ____ The student with a disability which precludes normal expressive language is eligible for dismissal when the student can communicate through the use of an augmentative communication system.	____ The student demonstrates fluency that is within normal limits for age, sex, and speaking situations or exhibits some transitory dysfluencies. There is minimal or no adverse effect on educational performance and minimal or no listener and speaker reaction.	____ The modal pitch is optimal, the laryngeal tone is clear, the rate is at an optimal duration, or nasality is within normal limits a minimum of 80 percent of the time under varying conditions of use.

Comments____

____

____

SLP 11 White Copy: Student Folder Yellow Copy: Speech-Language Pathologist Pink Copy: Parent (Attach to the appropriate report of the Admission, Review, Dismissal meeting.)

Source: Howard County Public Schools, Ellicott City, Maryland, (1997). Reprinted by permission.

Note: Example only. State and local dismissal criteria vary. Follow state regulations and local policies and procedures.

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